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DUANE F. ALWIN is interested in the linkages between human development, the family, and social change. His forthcoming book (with Ronald Cohen and Theodore Newcomb), *Political Attitudes over the Life Span: The Bennington Women after Fifty Years*, articulates these issues in the context of a follow-up study of the Bennington College women studied by Newcomb in the 1930s and 1960s. His article in this issue (written with Jon Krosnick) is an outgrowth of that work. Alwin is professor of sociology and program director at the Institute for Social Research, University of Michigan, where he directs the Survey Research Center's Summer Institute in Survey Research Techniques.

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Weber, Max. (1921) 1968. "Society's Problems." Pp. 12-16 in *Economy and Society*, edited by Guenther Roth and Claus Wittich. New York: Bedminster.

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# The Role of General Theory in Comparative-historical Sociology<sup>1</sup>

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The methodological foundations of comparative-historical sociology have been transformed dramatically in recent years. Arguments against general theoretical models have proliferated, while the complexity and uniqueness of historical events and the virtues of inductive methods have been emphasized. The growing convergence of sociology and history has led to a decline in the use of general theories. This article begins with a description and analysis of the recent transformation of the methodology of comparative-historical sociology. An overreliance on inductive methods has resulted in inadequate specifications of causal relations and causal mechanisms in recent comparative-historical sociology. The concluding section discusses a nascent rational choice research program in political sociology to illustrate an alternative methodology.

Suppose that radical shifts in the points of view which constitute an item as an object of investigation have taken place. Suppose that, as a result of these shifts, the idea arises that the new "points of view" also require a revision of the logic of scientific research that has hitherto prevailed within the discipline. And suppose that the result of all this is uncertainty about the "essential purpose" of one's own scientific work. It is incontestable that the historical disciplines now find themselves in this predicament.

[MAX WEBER (1922) cited in Oakes (1975, p. 15)]

The role of general theory in comparative-historical sociology is under attack. Several major comparative-historical scholars have published methodological manifestos inveighing against analyses derived from gen-

<sup>1</sup> This is a revised version of a paper presented at the session, "Historical Sociology and Its Methods," at the meetings of the American Sociological Association, Atlanta, August 24-28, 1988. We are grateful to Debra Friedman, Kathryn Baker, Robert K. Merton, members of the Iowa Workshop on Theoretical Analysis and the Project on the Rhetoric of Inquiry, the Political Economy Drinks and Discussion Group at the University of Washington, and to Edgar Borgatta, Terry Boswell, William Brustein, Paul Burstein, Karen Cook, Herb Costner, Lex Donaldson, Rosemary Gartner,

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eral theories in favor of those primarily based on induction (Bendix 1984; Stinchcombe 1978; Tilly 1981, 1984; Skocpol and Somers 1980; Skocpol 1984; Ragin and Zaret 1983; Zaret 1978). Because of historical contingency and context dependency, the best we can do—these writers argue—is develop explanations that are limited to particular spatiotemporally defined units (Skocpol 1985, p. 28; Ragin and Zaret 1983, p. 740; Tilly 1984, p. 14; Bendix 1963, 1984; Chirot 1985; Roth 1971; Zaret 1978; Mann 1986).

These methodological arguments attempt to justify an orientation to the relation between theory and data that traditionally has been more historical than sociological. Historians' methodology stresses the accuracy and descriptive completeness of narratives about particular events. Since the events they seek to describe and explain are both unique and complex, historians are compelled to tolerate a certain degree of methodological license. They are prepared to employ loose conceptualizations (Coats 1989, p. 347) and often resort to nonrigorous methodologies (Sewell 1987, p. 170). Instead of relying on necessary explanations, historians are willing to use sufficient ones, in which an event is taken to be a natural outcome of a sequence. The structure of their arguments, therefore, tends not to be implicative (involving deductive logic), but conjunctive (involving the use of coherent narrative).

Are the norms of history coming to replace those of sociology in judgments of comparative history? Several comparative-historical sociologists have cited historians' methods approvingly (Stinchcombe 1978, p. 23; Skocpol 1986, p. 194), and many others have advocated a methodological convergence of sociology and history. Zaret (1978, p. 118), for example, suggests that "analytic historiography obviates the ideographic/nomothetic cleavage between history and sociology." For Abrams (1982, p. ix), sociology and history have a "common project." Giddens (1979, p. 230) argues that the two disciplines are and should be the same (see also Burke 1980, pp. 28–30; Stedman Jones 1976; Tilly 1970; Wallerstein 1979, p. x).

Comparative-historical sociologists are tending to move from arguments against *specific* theories to arguments against *theory in general*. Almost all the polemics against general theory in this literature begin as criticisms of specific theories, especially functionalism and Marxism (see

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Walter Goldfrank, Alvin Goldman, John R. Hall, Douglas Heckathorn, Guillermina Jasso, Ronald Jepperson, Margaret Levi, Barry Markovsky, Donald McCloskey, Fred Pampel, Philip Pettit, James Price, William Sewell, Jr., Joel Silbey, Margaret Somers, Michael Taylor, Charles Tilly, Stephen Wieting, David Willer, and three anonymous reviewers for their comments. Requests for reprints should be directed to Edgar Kiser, Department of Sociology, DK-40, University of Washington, Seattle, Washington 98195.

Abrams 1982, pp. 106–48, 162–63; Apter 1971, p. 7; Bendix 1984; Nisbet 1969, pp. 190–93; Ragin and Zaret 1983; Ragin 1987; Skocpol 1986; p. 31; Stinchcombe 1978, pp. 21–22, 81; Tilly 1970; 1981, pp. 95–109; 1984). For Reinhard Bendix (1984, p. xiii), “comparative analysis is a weapon to be wielded against closed theories of history, as well as grand deductive theories.”

Such antitheoretical notions are quite novel in sociology. Probably the greatest classical statement of comparative-historical methodology is by Weber, and his position has been uniformly praised by contemporary comparative-historical scholars (see Stinchcombe 1978, p. 22; Skocpol 1979, 1985; Ragin and Zaret 1983; Bendix 1984; Mann 1986). Even Weber, however, believed that the understanding of historical outcomes could only be attained by wedding general, transhistorical concepts (“historical models,” or ideal-types) to specific courses of events (“secular theories”) (Roth 1968, 1971).<sup>2</sup> Until the last decade or so, most American sociologists both noted and praised the distinction between sociology and history, viewing sociology as the more general and theoretical (nomothetic) and history as the more particular and descriptive (ideographic) of the two disciplines. In consequence, sociologists were favorably disposed to the use of general theories in comparative-historical research (Holt and Turner 1970, p. 2; Marsh 1967, pp. 18–20; Smelser 1959, pp. 2–8; 1968, pp. 90–91; Zelditch 1971).

What accounts for this major shift in emphasis? To some extent it can be traced to the existence of a theoretical vacuum in the discipline. The decline of the hegemony of functionalism and the failure of Marxism to take its place have left sociology in a “theoretical interregnum” (Wiley 1986). The current crop of comparative-historical sociologists came of age when these two perspectives were competing for theoretical dominance. For many in this generation, these two deeply flawed theories stand as proxies for all theory, and their rejection is tantamount to a rejection of the entire theoretical enterprise.<sup>3</sup>

<sup>2</sup> Given this, it is odd that comparative-historical sociologists often denigrate theory by invoking the name of Weber. Contemporary Weberians have been much more antitheoretical than was Weber himself. Weber's *Economy and Society* ([1922] 1968) contains a long, detailed, systematic discussion of his methodology, his orienting concepts, and the relation between the two. Weber's concerns are much more explicitly theoretical than those of most contemporary self-described Weberians (with the exception of Eisenstadt and Collins). Reuschmeyer (1984, p. 161), e.g., notes that “Max Weber was far more willing than Bendix to state causal generalizations.”

<sup>3</sup> “We sixties-generation people do not yearn for one grand sociological theory such as Parsonian structure-functionalism; nor do we imagine that sociology can be a pure, cumulative, technically-grounded science” (Skocpol 1988, p. 632). In this article, we do not venture to discuss functionalism and Marxism, since they have been criticized so often.

This article contends that those who seek causal explanations of historical events cannot hope to dispense with general theories. This is because adequate explanations must specify both causal *relations* between variables (including *models* that indicate how causal factors are interrelated) and the *mechanisms* responsible for producing these relations. Whereas causal relations sometimes can be inferred from empirical observations, causal mechanisms in social science can only come from general theories.<sup>4</sup>

#### WHAT ADEQUATE EXPLANATIONS MUST ENTAIL

There is wide agreement across social science disciplines about the first requirement of an adequate explanation—causality. Variable *Y* is causally dependent on variable *X* if and only if by modifying *X* one can (or could) affect *Y*. An explanation entails the assertion of such a causal relation, in that the fact to be explained is seen as the product of the other fact(s) implicated in the explanation. A causal relation is self-determined and not parasitic on other causal influences. Causal relations must be inferred because, following Hume, it is generally acknowledged that causality can never be directly observed. Rather, it must be interpreted on the basis of observables (Holland 1986, pp. 947–48). One of the principal concerns of sociological methodologists has been to elucidate the conditions under which it is justifiable to infer causal relations. Causal inferences are easiest to draw from experimental data, for in these data the cause of interest is subject to manipulation, while other causes presumably are subject to control.

To justifiably infer causality, all possible spurious causes of *Y* must be ruled out.<sup>5</sup> Since there is no opportunity to manipulate causal factors in nonexperimental data, drawing causal inferences from these data raises much greater problems. Yet these are the kinds of data that most sociolo-

<sup>4</sup> With the exception of Stinchcombe (1978), recent discussions of comparative-historical methods have focused only on causal relations. Causal mechanisms have been given little attention.

<sup>5</sup> The problem of spuriousness typically arises when a variable that is the apparent cause of some effect is revealed later to be the product of some temporally prior variable. Recent research on deterministic chaos brings to light a quite different problem of spuriousness. This might be called the spurious assumption of randomness. A series of events that is seemingly the product of a purely random process (such as fluctuations in the stock market) on later analysis may be discovered to be the outcome of a simple, deterministic, nonlinear mechanism (Anderson, Arrow, and Pines 1988). For an attempt to model stock market fluctuations as the outcome of a deterministic chaotic process, see Day and Huang (1989). Whether deterministic chaos has much relevance for the kinds of problems that sociologists are concerned with remains an open question (for a skeptical opinion by a sociologist, see Berk [1988, p. 158]; for optimistic opinions by economic historians, see Day [1983] and David [in press]).

gists collect and analyze, and they employ various conventions—with varying degrees of success—in their efforts to avoid inferential errors (Berk 1988). If it is difficult to justify causal inferences in nonexperimental data, it is far more difficult to do so in historical data, for by their very nature such data allow for minimal manipulation and control.

Yet even when causal inferences *can* be justified in historical data, this will not suffice for explanatory purposes. A complete explanation also must specify a *mechanism* that describes the process by which one variable influences the other, in other words, how it is that *X* produces *Y* (Blalock 1961, p. 9; Salmon 1984, chap. 5; Elster 1989, pp. 4–7; Lloyd 1989, p. 461). Mechanisms are vital to causal explanations, for they indicate which variables should be controlled in order to highlight existing causal relations. The explicit discussion of mechanisms makes it more difficult to make ad hoc arguments and often reveals contradictions in arguments that would not be apparent just from a list of causal relations. General causal mechanisms also yield the numerous precise empirical implications necessary for testing theories.

Yet, like causality itself, mechanisms are not directly observable.<sup>6</sup> How then are they to be imputed? The development of consensus on the existence of atoms and molecules offers a clear example from the physical sciences (see Nye 1972). Whereas atomic conceptions of matter date from antiquity, no strong evidence for the atomic theory of matter was available before the beginning of the 19th century. During this century, well-informed scientists could hold different viewpoints on the question. By 1912, the issue was settled in favor of the atomic/molecular hypothesis. This achievement was due to the determination of Avogadro's number *N*, the number of molecules in a mole of any substance. This number provides the link between the macrocosm and microcosm; once it is known a variety of microquantities are directly ascertainable. Although there had been early estimates of *N*, the scientific community was not persuaded until a variety of independent estimation techniques (including studies of Brownian motion, alpha decay, X-ray diffraction, blackbody radiation, and electrochemistry) all provided the same, exact estimate of *N*.

Since the social sciences are not exact, causal mechanisms in social

<sup>6</sup> "There appears to be an inherent gap between the languages of theory and research which never can be bridged in a completely satisfactory way. One *thinks* in terms of a theoretical language that contains notions such as causes, forces, systems, and properties. But one's *tests* are made in terms of covariations, operations, and pointer readings. Although a concept such as 'mass' may be conceived theoretically or metaphysically as a property, it is only a pious opinion, in Eddington's words, that 'mass' as a property is equivalent to 'mass' as inferred from pointer readings" (Blalock 1961, p. 5; emphasis in original).

science are unlikely to be established in such a relatively direct fashion. According to Hume ([1748] 1894, I.iii.12), whenever the source of some event is unobserved, we should proceed on the hypothesis that it fits a pattern of causal uniformity.<sup>7</sup> Causal uniformity implies the existence of a lawlike relationship that holds between events. In addition to uniformity, lawlike relationships must be universal,<sup>8</sup> omnitemporal, and contingent—that is, not logically necessary (Beauchamp and Rosenberg 1981, pp. 84–88). In essence, causal explanation works by subsuming events under causal laws (Elster 1983, p. 26),<sup>9</sup> and causal laws, in turn, derive from general theories.<sup>10</sup>

Since different general theories produce different mechanisms, how can the most appropriate mechanism be selected from all possible candidates? Although there is no hard and fast rule, *plausibility*, *reduction of time lags between cause and effect*, and the *empirical implications* of different mechanisms can all serve to distinguish between rival causal mechanisms.

In the first place, only certain types of mechanisms are deemed plausible by the relevant scientific community at any given time.<sup>11</sup> For example, many have noted a fairly strong (but far from perfect) correlation between economic development and democratic political systems. Because of an inability to specify adequate causal mechanisms, it is not clear whether these two factors are causally related and, if they are, which is the cause and which the effect. Lenin's ([1918] 1964) argument that developed capitalist economies have democratic states because democracy is the "best possible shell" to conceal class domination relies on functionalist mechanisms now regarded as implausible. Lipset's (1960,

<sup>7</sup> Of course, it will not be possible to explain all events as the outcome of uniform causal laws. Some events will remain anomalous from the perspective of existing theories (and will thus lead to the progressive modification of these theories). However, the conclusion that an event is "unique" (and therefore cannot be explained by existing causal laws) should be the result of theoretical and empirical analysis, not an assumption with which analysis begins.

<sup>8</sup> In some cases, the laws will take the form of conditional universals, in which the scope conditions within which the law holds are specified abstractly.

<sup>9</sup> For a discussion of the differences between this notion of explanation and Hempel's "deductive-nomological" model, see Beauchamp and Rosenberg (1981, pp. 305–21).

<sup>10</sup> These limitations rule out historical narratives as a basis for the imputation of causal mechanisms. The evidence derived from such narratives may be critical in assessing the empirical implications of rival causal mechanisms, however.

<sup>11</sup> Every day the sun rises in the east and sets in the west at predictably different times. Yet the class of plausible mechanisms used to account for this empirical regularity in the Ptolemaic era of astronomy was very different from that in the Copernican era. In this way the criterion of plausibility sharply constrains the range of appropriate causal mechanisms.

pp. 27–63) modernization theory suggested that economic development facilitated democracy by decreasing inequality (thus creating a moderate, democratic middle class) and creating liberal democratic norms through education. Recent work indicates that economic development often does not decrease inequality (Evans 1979) and that education often does not create liberal values (Weil 1985), making Lipset's mechanisms seem less plausible. Although there is no consensus now about what mechanisms best explain this relationship, Bates and Lien (1985) provide one plausible account that is based on general theory. They argue that economic development increases the mobility of taxable assets, thus increasing the bargaining power of taxpayers relative to rulers (since mobile assets make tax avoidance easier). Under these conditions, rulers will be more willing to give up some control over state policies (by creating democratic institutions) in exchange for tax revenue.

However, plausibility alone is unlikely to point to a unique causal mechanism. Since the elimination of spuriousness is the fundamental challenge to the justification of causal inference, the greater the reduction of the time lag between explanans and explanandum, the more preferable the mechanism (Beauchamp and Rosenberg 1981, chap. 5). A mechanism that involves a large time lag between explanans and explanandum leaves greater latitude for the introduction of spuriousness. One way to minimize the explanatory time lag is to specify mechanisms that link macro-level variables using intervening micro-level ones:<sup>12</sup> "Although the purpose of a mechanism is to reduce the time lag between cause and effect, the success of the reduction is constrained by the extent to which macro-variables are simultaneously replaced by micro-variables" (Elster 1983, p. 24).<sup>13</sup>

For example, most recent studies of the causes of war consist of inductive generalizations formed from correlations between structural vari-

<sup>12</sup> It is not always necessary or useful to provide mechanisms at the micro level. As Jackson and Pettit (in press) point out, structural causal mechanisms (which they call "program" mechanisms) sometimes provide adequate explanations of macro-level phenomena. Models of natural selection provide one example. Situations in which structural factors are so powerful that regardless of what happens at the micro level the outcome will be unchanged do not require micro-level causal mechanisms either. However, these structural mechanisms are only sufficient under certain, very limited, conditions. In our opinion, since these conditions are rarely found in the topics studied by sociologists, most comparative-historical explanations that rely solely on structural arguments are incomplete.

<sup>13</sup> Yet, "from the standpoint of either scientific investigation or philosophical analysis it can fairly be said that one man's mechanism is another man's black box. I mean by this that the mechanisms postulated and used by one generation are mechanisms that are to be explained and understood themselves in terms of more primitive mechanisms by the next generations" (Suppes 1970, p. 91).

ables. These studies have looked at the relationship between factors like economic cycles, internal conflicts, and alliance structures, and the frequency of war initiation and intensity (Bueno de Mesquita 1980). One problem with this literature, and no doubt part of the explanation for the contradictory findings in it, is the large time lag between these putative causes and their effect. This time lag may be reduced by specifying the micro-level factors (interests of relevant actors) (Bueno de Mesquita 1981) and meso-level factors (determinants of the outcomes of political conflicts between these actors) (Kiser 1989) that intervene in the relationship between structural factors and war initiation.

Finally, even if they are not directly observable, different causal mechanisms often have different empirical implications. We are most likely to be persuaded by the appropriateness of a causal mechanism when we find evidence of specific features of an outcome that is uniquely implicated by that particular mechanism.<sup>14</sup> The point can be illustrated in the following sociological example. Four factors—common ethnic background, hierarchical authority, obligatory confession, and the wearing of uniforms—have been found to be positively correlated with the longevity of 19th-century American intentional communities. Two different mechanisms have been proposed to explain the relationships between these institutional arrangements and community longevity. In one view, the four factors are commitment mechanisms that contribute to communal longevity by strengthening members' identification with their group. In another view, the four factors enable members to reap economies of control so as to curtail potential free riders. The two mechanisms have at least one different empirical implication. If internalization is the proper mechanism, then these institutions will disproportionately be found in the initial stages of community development. If control is the mechanism, however, then these institutions will be found at all stages of community development. The available data reveal the superiority of the second mechanism (Hechter 1990a).<sup>15</sup>

<sup>14</sup> "Observational evidence for a theory which contains *non*-observable terms is evidence for the truth of its as yet untested observational consequences even though the deduction of these consequences may crucially involve the non-observational portions of the theory" (Boyd 1973, p. 2; emphasis in original).

<sup>15</sup> The point also can be made by returning to the Copernican example. Two different mechanisms were used to account for the relative motion of the earth and the sun. The Ptolemaic mechanism implicated the sun as the moving body and the earth as the stationary one. The Copernican mechanism implicated the sun as the stationary object and the earth as the moving one. If scientists had had the opportunity to observe the solar system from an orbital platform, the superiority of the heliocentric mechanism could have been established thereby. The great debate about the nature of our planetary system was occasioned only by the unavailability of such direct evidence.



The number and type of empirical implications of explanations determines their testability.<sup>16</sup> Explanations from which many diverse empirical implications can be derived are easiest to test (Stinchcombe 1968, pp. 19–20). Moreover, only explanations that produce *precise* empirical implications can be tested (Merton 1957, pp. 97–99). Numerous, diverse, and precise empirical implications can only be produced by general theories with clear explicit assumptions, models specifying relations between causal factors, general causal mechanisms, and derived propositions. Much of what is deemed theory in sociology, such as typologies, orienting concepts, and empirical generalizations, cannot generate testable empirical implications.

As a result of the narrowness and lack of precision of their empirical implications, explanations in current comparative-historical sociology have become difficult if not impossible to test. The predominance of historians' norms in comparative-historical sociology has led to an imbalance in the nature of explanation: scope (generality) and analytic power have been minimized and descriptive accuracy has become the predominant criterion for constructing and judging explanations (see Heckathorn 1983, 1984; Blalock 1984). Middle-range explanations—those not derived from general theory but tailored to fit a particular historical object—have come to dominate comparative-historical sociology. Generalizing these explanations beyond particular historical cases is often discouraged (Tilly 1975; Skocpol 1979),<sup>17</sup> but explanations with so few empirical implications cannot easily be tested (Popper [1934] 1959, pp. 112–13; Stinchcombe 1968, pp. 17–22).

The overemphasis on descriptive accuracy has resulted in a decrease in the analytic power of explanations, which also limits their capacity to be tested (Heckathorn 1984, p. 297). Analytic power depends on the number of independent variables (the fewer variables to be measured, the easier it is to test), and the number of relations between these variables (the more relations, the easier it is to test). The stress on the descriptive accuracy has produced explanations consisting of long lists of causal factors, and the rejection of general theory has resulted in a lack of

<sup>16</sup> A complete discussion of the necessary and sufficient conditions for a theory to be testable is beyond the scope of this paper. Thus, we make no attempt to specify all of the sufficient conditions but concentrate only on a few of the most basic necessary conditions.

<sup>17</sup> An additional difficulty raised by limiting the scope of explanations by tailoring them to particular cases is that this method does not produce the anomalies that are necessary for progress in science (Popper 1959; Kuhn 1962; Lakatos 1978; Bhaskar 1975). An anomaly is a research finding contrary to a prediction derived from a theoretical framework. Anomalies only arise from precise theories that make explicit predictions: they are the products of theoretical boldness (Kuhn 1962, p. 65).

*models* indicating relations between these factors (e.g., see Tilly 1975; Chiot 1985). When data are fragmentary and hard to come by—as often is the case in comparative-historical research—only a theory with high analytic power, and thus low data input requirements, can be tested (Heckathorn 1984, pp. 302–3; Lenski 1988, p. 168; Blalock 1984, p. 90).

#### WHY CAUSAL RELATIONS ARE ESPECIALLY DIFFICULT TO INFER IN COMPARATIVE-HISTORICAL SOCIOLOGY

Beyond their common commitment to an inductive methodology, comparative-historical sociologists have serious methodological disagreements: some are best considered historicists, whereas others are generalists.<sup>18</sup> However, neither of these types is likely to produce satisfactory causal explanations of historical outcomes.

#### The Liabilities of Historicism

Historicism, the approach closest to that practiced by historians, is the most radical departure from the methodology of mainstream sociology. Historicists—Reinhard Bendix and Michael Mann are prominent exemplars—reject positivist (and most postpositivist) philosophy of science, as well as theory in any of its guises.<sup>19</sup> They favor interpretations that stress the complexity, uniqueness, and contingency of historical events, and holistic approaches to the study of history.<sup>20</sup>

The epistemological justification of historicism rests on Weber's

<sup>18</sup> We do not mean to imply that historicists and inductive generalists agree on all methodological issues. Historicists have been critical of the comparative inductive method (Mann 1986, pp. 501–3), and inductive generalists have been critical of historicism (Skocpol and Somers 1980, p. 192; Tilly 1984, p. 73).

<sup>19</sup> Bendix is a much stronger proponent of historicism than is Mann; his rejection of theory is nearly total. At some points, Mann makes arguments rather close to ours (1986, p. vii), although the general thrust of his work is definitely historicist. In the preface (p. vii) he mentions "testing theories" favorably, but by the end of the book he describes his method in much looser terms, as "careful historical narrative, attempting to establish 'what happened next' to see if it has the 'feel' of a pattern, a process, or a series of accidents and contingencies" (p. 503).

<sup>20</sup> There are two different forms of historicism, empiricist and interpretive. Empiricist historicism views knowledge as cumulating through the gathering of facts about the past. The scholar using this methodology claims to have no theory (preferably no preconceptions at all) but simply lets the facts speak for themselves. Although some traditional historians have endorsed empiricism (among them Dray [1957, p. 106] and Elton [1967, pp. 52–56]), it has few advocates among philosophers or comparative-historical sociologists. We will therefore focus on the interpretive form of historicism (based on the work of Weber and phenomenologist and hermeneutic philosophy) and refer to it simply as *historicism* throughout.

method of *Verstehen* (Bendix 1984, p. 31) and on phenomenological and hermeneutic traditions (Gadamer 1972; Ricoeur 1984). The fundamental tenet of historicism is that the methodology of the social and historical "sciences" is unique. Since social reality contains an important subjective dimension that is revealed only through interpretative understanding, the social world cannot be known in the same objective causal manner as the natural. Hence, the detached objectivity that is often assumed to be necessary for causal analysis is unattainable.<sup>21</sup> Historicists subscribe to a conventionalist philosophy of science that leads to a rejection of general causal laws (Bendix 1984, p. xiii; Mann 1986, p. 341).

Gadamer (1972, p. 116) summarizes this position well: "Historical consciousness is interested in knowing not how men, people or states develop *in general*, but, quite on the contrary, how *this* man, *this* people, or *this* state became what it is; how each of these particulars could come to pass and end up specifically *there*" (see also Mann 1986, p. 32). Historicists often conceive of the relation between particular events as contingent and accidental.<sup>22</sup>

They are also methodological holists: for them the parts can be understood only in relation to the whole (Gadamer 1972, p. 146). Following Maitland's famous aphorism that history is a seamless web, historicists aim to construct descriptively rich narratives to capture the complexity of historical events.

Yet, since no description is, or ever can be, complete, assumptions and conceptual orientations often remain implicit or hidden in historicist research. Because historicists are not explicit about their reasons for focusing on some aspects of events and not on others, the biases in their incomplete descriptions are not obvious.<sup>23</sup>

Historicism offers a difficult target to criticize, for it does not provide a set of clear and explicit rules but remains a loose, abstract orientation defined more by what it denies than what it affirms. Many historicist arguments ring true: every historical event *is* at least in some respects unique, and history *is* very complex. But do these truisms about history justify a radical rejection of general theory?

The historicists' antipathy to theory is based on an invalid inference

<sup>21</sup> This historicist argument does not lead to the conclusion that causal laws are not possible in the social sciences. Lakatos (1978) has shown that the progress of competing research programs does not depend on their proponents being detached, neutral, or value free (which obviously they are not).

<sup>22</sup> Thus Mann (1986, p. 505): "The *origins* of the European miracle were a gigantic series of coincidences."

<sup>23</sup> Thus Reuschmeyer (1984, pp. 145, 150–52) criticizes Bendix for "hidden assumptions" and an "inclination toward historical narrative in which much of the more detailed theoretical reasoning is buried, if it is made explicit at all."

drawn from some reasonable premises. Granted, historical events are often complex and unique, but this does not mean that general theories cannot help explain them (Blalock 1961, p. 7). Individual human beings are also complex and unique, but this does not mean that general theories are useless in accounting for their behavior.

Ironically, the historicists' emphasis on the complexity of history (Mann 1986, pp. 4, 28; Chirot 1985, p. 181),<sup>24</sup> and their rejection of the analytical separation of parts from wholes, is inimical not only to general theory but also to the very enterprise of comparing different societies—a fact that few scholars in this tradition seem to recognize. Comparative history is an oxymoron to a true historicist; for that reason, the enterprise itself is held in low repute by many professional historians.

### The Liabilities of Inductive Generalism

Inductive generalism is by far the most popular methodology in comparative-historical sociology, and Theda Skocpol is its most prominent practitioner.<sup>25</sup> Generalists attempt to apply Mill's (1888, bk. 3, chap. 8) method of agreement and method of difference to the joint analysis of multiple cases, so that they may create and evaluate historically limited explanations. Many of the philosophical and methodological difficulties surrounding the use of induction in sociology are by now familiar. Mill himself regarded the difficulties as so severe that he believed the inductive method inappropriate for the social sciences (Mill 1888, bk. 4, chap. 7; for a critique of the utility of these methods for causal inference, see Cohen and Nagel [1934, chap. 13]). Both Durkheim (1982, pp. 150–51) and Weber (Oakes 1975, pp. 24–25) explicitly criticized the Millian inductive method, as do most contemporary philosophers of science.<sup>26</sup>

<sup>24</sup> For example, the "theoretical model" that opens Mann's book contains two types of causal arrows: unbroken lines denoting relations that lend themselves to theoretical analysis and broken lines denoting relations "too complex to be theorized" (1986, p. 28). The latter predominate.

<sup>25</sup> Theda Skocpol's substantive studies of social revolutions and welfare states have combined important criticisms of existing theoretical perspectives with insightful empirical generalizations about important historical events. She has also been self-conscious and explicit about the methodological underpinnings of her work. It is therefore instructive to focus in detail on Skocpol's arguments because she has applied her inductivist methodology well. Several critics have noted methodological and theoretical problems with Skocpol's research on revolutions (Nichols 1986; Sewell 1985; Taylor 1988; Burawoy 1989). We will broaden these criticisms by putting Skocpol's work on revolutions in the context of her work as a whole and by discussing its relation to current trends in comparative-historical sociology.

<sup>26</sup> "Philosophy of science increasingly is coming to question the importance of inductive confirmation in the ongoing epistemic enterprise of science, thus relegating even

Use of the inductive method in comparative-historical research is simply inappropriate. For most of the subjects that comparative-historical sociologists are wont to explore, the ratio of cases to variables is too low for this method to yield any conclusions.<sup>27</sup> Further, Millian induction relies on the assumption that the cases to be compared are independent, but this raises Galton's problem (Hammel 1980, p. 147): diffusion and imitation connect societies so that few cases of interest are truly independent (Skocpol's revolutions are a case in point). Because cases must be independent, the inductive method cannot be used to study changes in one case over time. This rules out analysis of the diachronic dimension, or relegates it to a narrative account outside the inductive method, and places the analytic focus on static comparisons between cases.<sup>28</sup> Since the best way to test causal arguments is to follow cases over time, this is a severe limitation (Klein 1987, p. 23; Tilly 1975, pp. 11–12).

The approach often leads to sampling problems as well. Comparative-historical research is especially interesting because it focuses on large-scale historical events, such as the origins of modern states and nations (Tilly 1975),<sup>29</sup> the development of dictatorships and democracies (Moore 1966), and the causes and consequences of famous social revolutions (Skocpol 1979). Selecting "interesting" events for analysis is a type of sampling, however, and a none-too-systematic type at that. Since arguments in the inductive-generalist tradition are constructed from the bottom up, they reflect the bias inherent in the unsystematic nature of the sample from which they were drawn. If arguments are generalized from the sample, this bias will diminish their explanatory value, if not vitiate it altogether.<sup>30</sup>

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issues of local induction to a relatively minor role in scientific reasoning and further repudiating the central importance ascribed to induction and confirmation by the positivistic program" (Suppe 1977, p. 631). Note that most realist philosophers of science (who adopt a position closest to the one we advocate here) also reject the sufficiency of induction (Keat and Urry 1975, p. 35).

<sup>27</sup> This is the principal difficulty that motivates Ragin's (1987) Boolean algebra approach to comparative analysis.

<sup>28</sup> This is a serious difficulty for Skocpol because her historical orientation emphasizes the importance of processes and sequences of events (thus the privileging of the narrative form). Skocpol tries to get around the problem in *States and Social Revolutions* by adding the diachronic element in the form of abstract narratives. In effect, she combines generalist and historicist methods without clarifying the exact relation between the two (Nichols 1986).

<sup>29</sup> This is not true in all of Tilly's work. *The Vendee* (1964) explores a much less intrinsically important event, and, not coincidentally, that analysis is much more theory driven than most of his subsequent work. He focuses on a general explanation, arguing that it is applicable to a wide range of times and places (Tilly 1964, p. vii).

<sup>30</sup> To be evenhanded in our criticism, this type of bias is also a difficulty with Hechter (1975).

These problems make it difficult to test the relationships derived from inductive procedures. As an example, consider Skocpol's research on revolutions. Skocpol first limits the testability of her causal relations by disclaiming their generalizability and warning against "mechanically" extending them to other cases (1979, p. 288). Despite this, she then tries to apply the causal links generated from her study of the French, Russian, and Chinese revolutions to the Iranian Revolution (Skocpol 1982). The looseness of her argument is clear on the first page of the article, where she alters the definition of her dependent variable, social revolutions (cf. Skocpol 1979, pp. 4-5; 1982, p. 265). The definition of social revolution used in the Iranian case (unlike the one employed in her study of France, China, and Russia) includes a change in the "dominant ideology." This change in the explanandum is accompanied by a change in her argument (see also Arjomand 1988, p. 191). In spite of Skocpol's (1979) earlier strong objections to the use of ideology as a causal factor, it becomes one of the important explanans in her study of Iran (Skocpol 1982, p. 275).

The causal factors Skocpol identifies for the revolution in Iran are significantly different from those she suggested were important for the French, Russian, and Chinese revolutions. Losses at war are absent and are replaced by a fall in oil prices; peasant insurrections are absent and are replaced by urban revolts; and subjective and ideological factors become an important part of the story (Nichols 1986, pp. 181-84). Does this mean that Skocpol's earlier arguments have been tested and proven false? Not at all. Skocpol avoids testing her causal relations in two ways: she argues that Iran is "unique" (1982, p. 275), and she suggests that, although most of the specific causal factors have been changed, the Iranian Revolution can still be interpreted in terms that are "analytically consistent" with her previous "explanatory principles" (p. 268). These disclaimers exemplify the central weakness of inductivism: by relying on historical uniqueness and on vague "explanatory principles," inductivists' arguments are essentially untestable (see also Burawoy 1989, pp. 775, 778).

The Millian inductive method alone is insufficient to establish causal relations in comparative-historical research.<sup>31</sup> Some theory is also necessary (Skocpol and Somers 1980) to guide the choice of appropriate cases and to select appropriate factors for inclusion in the model (Ragin 1987).

<sup>31</sup> The inductive method involves several additional problems. It assumes that dependent variables always have the same causes, thus denying the possibility of various sufficient causes. The conditions necessary for the method of difference to hold—the similarity of all but one factor in two (or more) cases—almost never exist outside the laboratory.

The methods of agreement and difference will produce results that are a direct function of the cases chosen and the factors included.<sup>32</sup>

Yet, the role of theory is seldom specified in methodological discussions of research based on the inductive method. Two different strategies are used to avoid discussing its role. One is a move toward empiricism: "How are we ever going to arrive at new theoretical insights if we do not let historical patterns speak to us, rather than always viewing them through the blinders, or the heavily tinted lenses, of pre-existing theories?" (Skocpol 1986, p. 190). Another is the reduction of theory to something intuitive, as Skocpol does when she speaks of using "strategic guesses" to choose causal factors to be included in her model (1979, p. 39), or "hunches" to form hypotheses (1986, p. 190).<sup>33</sup> Hunches and intuition certainly have their place in research praxis, but they are hardly a substitute for general theory as a basis for the imputation of causal mechanisms.

#### THE FAILURE OF INDUCTION TO SUGGEST CAUSAL MECHANISMS

Not only is induction poorly suited for the establishment of causal relations in historical sociology, but it cannot lead to the specification of the mechanisms that constitute the enduring focus of sociological explanations, either. Mill's methods of agreement and difference say nothing about the ways that causes produce effects; the application of these methods produces a set of consistent correlations, at best. Sociologists do not teach *Suicide* because Durkheim established reliable correlations between suicide rates and types of religion or family structure. Instead, our

<sup>32</sup> In *States and Social Revolutions* Skocpol (1979) gives two accounts of case selection, one based on her personal history (pp. xii–xiii) and the other on the similarities between the cases themselves (pp. 40–42; see also the stress on similarity as a criterion for case choice in Evans, Rueschemeyer, and Skocpol [1985]). Most of her papers on the welfare state contain no explicit discussion of case selection. (See Skocpol 1980; Skocpol and Ikenberry 1983; Weir and Skocpol 1985. Orloff and Skocpol [1984] is an exception, however; in that paper cases are chosen on the basis of previous theory.) The method of choosing cases is especially important for Skocpol because of her reliance on induction to produce generalizations. In a recent paper on the welfare state, she argues that she wants to use "comparisons among Sweden, Britain, and the United States to develop an explanation" (Weir and Skocpol 1985, p. 119). Yet if explanations are built on the basis of comparisons of particular cases, then the explanation is a function of the particular cases chosen for comparison. Since no compelling arguments are given as to why these cases and not others were chosen, no generalization beyond the particular cases studied is warranted.

<sup>33</sup> Skocpol is not the only comparative-historical scholar to view the "theory" with which one begins a research project in such loose terms. Mann (1986, p. vii) also talks about beginning with "theoretical hunches," and Stinchcombe (1978, p. 4) suggests research should begin with a "vague general notion."

interest is held by the various causal mechanisms that Durkheim advanced to account for these correlations (in this case, the breakdown of normative controls over egoism). The same is true of Marx. Even though many of his predictions have turned out to be incorrect, Marx's work provides important causal mechanisms derived from general theory.

In most recent comparative-historical work, causal mechanisms are either absent, implicit, or used in an ad hoc manner.<sup>34</sup> But sociologists who seek consistent, testable causal explanations for historical events are ill-advised to proceed in this fashion.

We all know that there were revolutions in France in 1789, Russia in 1917, China in 1949. Skocpol shows that—given certain common structural conditions (among them, external geopolitical pressures on states)—the existence of strong peasant communities is positively associated with the outbreak of revolution. Even if we grant the validity of this causal inference, a satisfactory explanation must reveal *why* revolution occurs where peasant communities are strong. What is the mechanism that links revolutionary outcomes with this particular structural precondition? Such mechanisms must be imputed from general theories.

Taylor (1988) offers one such mechanism, derived from the theory of repeated games. He claims that it is rational for individuals in solitary peasant communities to participate in revolutionary collective action. This particular mechanism is drawn from the analogy of peasant communities with *N*-person prisoner's dilemma supergames. Since the definitional requirements of these supergames are explicit, the appropriateness of the analogy is subject to empirical disconfirmation. Thus, one of the assumptions of this mechanism is that participants must engage in social relations that recur indefinitely. This carries with it the empirical implication that the incidence of collective action should vary inversely (*ceteris*

<sup>34</sup> We focus in this section on Skocpol's argument about the relationship between peasant communities and revolutions, which, as others have noted, lacks adequate causal mechanisms (Taylor 1988; Burawoy 1989, p. 771). Although space limitations do not permit us to include several other examples, we suggest that the lack of causal mechanisms is common in contemporary comparative-historical sociology. The problem is not limited to the Weberians we discuss, but also is present in the work of many contemporary Durkheimians and Marxists (see also Hunt [1984, pp. 3–14] on theories of revolution). Both functionalist (Swanson 1960, 1967; Erikson 1966) and world-system (Wallerstein 1974, 1980, 1989) analysts meet many of our criteria for general theory, but neither adequately specifies causal mechanisms. Mechanisms are often absent in functionalist work (see criticisms by Homans [1964, pp. 813–15] and Wuthnow [1985, pp. 779–800]) and are specified in an ad hoc manner by Wallerstein. The absence of causal mechanisms in these works is due to their inadequate micro-foundations (as is the case with Skocpol). Furthermore, the lack of causal mechanisms is not limited to comparative-historical work. Coleman (1986, pp. 328–29) notes that it is common in contemporary survey research in sociology, as well.



paribus) with the mobility of peasant communities (for in relatively mobile communities, the durability of social relations is questionable). Another requirement of the mechanism is that participants must share common knowledge about each other's past behavior (Hechter 1990*b*). The empirical implication of this is that the incidence of collective action should vary directly (*ceteris paribus*) with the density of settlement patterns in peasant communities (for monitoring costs are higher in scattered settlements).

Clearly, historical peasant communities in large states like France, Russia, and China varied significantly along these—and other—dimensions, and if Taylor's mechanism is correct we should be able to retrodict *which* kinds of villages (and regions) should have evinced the highest rates of collective action.<sup>35</sup>

#### AN ILLUSTRATION: THE DETERMINANTS OF STATE AUTONOMY AND ITS EFFECTS

Some of the most significant research in inductivist comparative-historical sociology concerns the extent and determinants of state autonomy and the formation of state policies. Recently, an interdisciplinary research program based on rational choice theory has begun to explore the same topics. The use of different methodologies to address similar substantive problems provides an opportunity to compare inductivist and historicist approaches to the analysis of state autonomy (Skocpol 1979, 1980, 1985; Mann 1984, 1986) with those based on a general theory—in this case, rational choice (North and Thomas 1973; Bates and Lien 1985; Kiser 1987, 1989; Levi 1988). Both approaches have attempted to answer two basic questions: (1) What explains variations in state autonomy? (2) What are the determinants of variations in state policies? The nature of their answers should reveal much about the utility of their respective methodological positions.

<sup>35</sup> While we have been critical of an exclusive reliance on induction, there is little reason to believe that a purely deductive approach offers a superior alternative. After decades of development, axiomatic theory in sociology (Berger, Zelditch, and Anderson 1972) has failed to cast much light on real-world problems. The same cautionary verdict must hold for purely deductive strategies in other disciplines, such as repeated game theory (Hechter 1990*b*; see Milgrom, North, and Weingast [1990] for an intriguing blend of induction and game theory), and public choice theory (Mueller 1989). Similarly, the theory of public goods (Olson 1965; Hardin 1982) has not been able to explain why revolutions sometimes do occur or why so many Americans turn out at elections. Unlike pure deductivists, we have no doubt that history matters. For a critique of deductive chauvinism—the view that the *only* logical devices required in the empirical sciences are deductive—see Grunbaum and Salmon (1988).

### Skocpol and Mann on State Autonomy

Skocpol and Mann (and other inductivists) have contributed a great deal to our understanding of state autonomy. They have demonstrated that states are potentially autonomous and that the extent of autonomy varies across time and space (Skocpol 1979, 1985; Mann 1986). Both have identified structural factors related to variations in autonomy in particular historical settings, and each has made general statements about what sorts of factors are likely to influence state autonomy. The more autonomous the state, the greater its latitude in setting policy, both domestic and international. Therefore, they have shown that state autonomy is an important determinant of state policies.

Skocpol argues that the causal factors determining the autonomy of states are geopolitical and international orientations, domestic order-keeping functions, the organizational capacities of state officials, the structure of the state apparatus, prior state policies, and the resources available to the state and other actors (1979, p. 30; 1982, p. 267; 1985, pp. 9–11, 16–17). Her “state-centered” approach suggests that these political factors will be the most important causes, but it does not contain a model specifying how they are related or the conditions under which each of them is likely to be more or less important. Nor does her approach include general mechanisms that indicate how these factors produce variations in autonomy. Since she denies the possibility of a general theory of state autonomy (1979, p. 30), her analyses consist of descriptions of the relationships between subsets of these factors and state autonomy in particular historical cases (Skocpol 1979; Skocpol and Ikenberry 1983).<sup>36</sup> But how can we judge the validity of her arguments? Skocpol’s state-centered approach is too vague to generate precise empirical implications, and her historical analyses generate too few empirical implications, making her explanations untestable.<sup>37</sup>

Although Mann is also skeptical about the possibility of a general theory of state autonomy (1984, p. 206), he does discuss some factors related to it. He begins (1984, pp. 196–207; 1986, pp. 416, 514–15) with a functionalist argument that autonomy is positively related to the “social utility” of “territorial” functions (such as property rights and geopolitical diplomacy) that only a state can provide. These functions are then ex-

<sup>36</sup> Skocpol devotes much more attention to the consequences of autonomy for state policies than to the causes of autonomy, so we also will concentrate on her analysis of state policies.

<sup>37</sup> As Skocpol has moved from a “state-centered” argument (1979) to one labeled “institutional-political process” (1988), she has expanded the number of causal factors included and further decreased the analytic power and testability of her arguments (see Piven’s [1989] criticisms).

exploited by state rulers trying to increase their power. If "civil society forces" cannot "control" states (their ability to do so is primarily determined by resource distributions), state autonomy will increase. However, if rulers cannot control state officials, resources will be lost to "civil society" and autonomy will decline (1984, pp. 203–5; 1986, pp. 437, 478–82).

Mann's explanation of variations in state autonomy, like Skocpol's, is too incomplete and vague to yield precise empirical implications. Granted, resource distributions and the ability of subjects to use organizations and institutions to control rulers are important determinants of autonomy. These insights constitute only the beginnings of an explanation of state autonomy, however. Their explanations do not indicate when and how groups are able to act collectively to control rulers, how resource distributions produce variations in autonomy, what types of control mechanisms are most important, or how they constrain the actions of rulers. A complete explanation would have to include models specifying how these factors are related and causal mechanisms indicating how they produce variations in autonomy. Only then would precise empirical implications emerge. But models and mechanisms can only come from general theory, which both Skocpol and Mann reject.

### A Rational Choice Model of State Autonomy

Rational choice theory provides one source of testable theoretical models that can subsume the important insights of Skocpol and Mann and complete the project they have begun. All rational choice explanations begin with the assumptions that individuals are purposive and intentional actors who pursue prespecified goals.<sup>38</sup> Given these goals, the resulting actions of rulers will be determined by variations in structural constraints. Beginning with these basic assumptions, rational choice political sociologists then apply one or more of the causal mechanisms derived from available theories—such as power-dependence theory, repeated game theory, optimal location theory, agency theory, and group solidarity theory—to the problem at hand (see Friedman and Hechter 1988).

The problem of state autonomy can be modeled in a very simple fashion. In the first stage of the model, the autonomy of the state is conceived to be a function of the relative power of rulers vis à vis their subjects. This relative power is principally affected by (1) *the degree to which rulers are dependent on subjects for revenue and other resources* (Emer-

<sup>38</sup> Rational choice explanations of macrosocial outcomes usually include the additional assumption that actors are self-interested (for reasons explicated in Hechter [1987, pp. 31–32]).

son 1962, 1981) and (2) *the capacity of subjects to monitor and sanction rulers* (derived from agency theory [Jensen and Meckling 1976] and group solidarity theory [Hechter 1987]).

The dependence of rulers on subjects varies inversely with the value of resources controlled by the ruler, but it also varies directly with the mobility of subjects' resources (since mobile assets are easier to conceal or move to another country [Bates and Lien 1985]). One empirical implication can be drawn from the first proposition:<sup>39</sup> the greater the value of crown lands owned by absolute monarchs, the greater their autonomy.<sup>40</sup> An empirical implication of the second proposition is that the greater the proportion of total national resources controlled by merchants (as opposed to landlords), the lower the autonomy of rulers.<sup>41</sup> Przeworski and Wallerstein (1988) develop the argument further, by showing that the dependence of the state on capitalists, who control the mobility of capital, is much greater when the state relies on taxes from income rather than those from consumption.

The other principal factor affecting the autonomy of the state is subjects' capacity to monitor and sanction rulers (Hechter 1987; Kiser 1987). Agency theory (Jensen and Meckling 1976) offers one way to model this process. A principal-agent relation exists when one or more persons (the principal) engages another (the agent) to perform some service on its behalf that involves the delegation of some decision-making authority. Because the agent (in this case, the ruler) always chooses to exercise this authority to promote its own interests at the expense of the principal's (subject's), a problem arises. To insure that the ruler acts in their interests, subjects must possess a capacity to monitor and sanction the agent's behavior.

The main empirical implications of this model are that control capacities of subjects will vary directly (and thus the autonomy of rulers will vary inversely) with the political organization of subjects (ranging from peasant communities to political parties), with the existence and strength of independent representative assemblies and independent judicial insti-

<sup>39</sup> Several additional empirical implications follow from this and other propositions in this section; we will provide only a few examples. Moreover, these are isolated examples taken out of the context of the general model and are thus only true *ceteris paribus*. A complete analysis of state autonomy would have to look at the overall effects of resource distributions and all relevant control capacities.

<sup>40</sup> The high autonomy of Henry VIII (relative to Elizabeth I and the early Stuarts) and of Gustav Vasa in Sweden (relative to Queen Christina) can be explained in part by their possession of resources from crown lands (Kiser 1987).

<sup>41</sup> The importance of the mobility of subjects' assets explains why the rise of Parliament is associated with taxes on "movables" in medieval England (Bates and Lien 1985) and why capitalists have increasing power over the policies of contemporary states.

tutions,<sup>42</sup> and with constitutional limits on ruler's authority (such as the Magna Charta).<sup>43</sup>

### Consequences of State Autonomy: Contrasting Explanations of State Policies

The reason many scholars have become interested in the autonomy of rulers is because it is thought to be a decisive factor in determining state policies. However, the relationship between the autonomy of rulers and the policies of states is mediated by the interests (goals) of rulers and other relevant actors and the ability of rulers to control state officials.<sup>44</sup> Policies vary as the autonomy of rulers varies because the ruler's interests often differ from those of other political actors. The interests of relevant actors thus provide the micro-level causal mechanisms necessary to explain the relationship between state autonomy and state policies. In rational choice theories, interests are specified a priori, thus allowing for testable predictions to be made about how variations in autonomy (and other structural factors) will affect state policies (Bates 1981, 1983; Kiser 1987; Levi 1988).<sup>45</sup>

In contrast, Skocpol and Mann (and most other contemporary comparative-historical sociologists) primarily use ad hoc narrative ac-

<sup>42</sup> In early modern Western Europe, representative assemblies were institutions that offered subjects monitoring and sanctioning capacity over their rulers. Yet the location and forms of these assemblies varied widely. Why, for instance, did England develop a national legislative assembly, while regional ones were dominant in early modern France and Spain? One reason is that France and Spain were larger territories, and principals would have had to bear larger costs traveling to the capital to control their royal agent (Levi 1988).

<sup>43</sup> The presence of strong representative assemblies limited the autonomy of absolutist rulers by limiting their fiscal extractions. For example, Parliament consistently blocked the attempts of Charles I to raise the tax revenue necessary to participate in the Thirty Years' War, while French and Spanish rulers, not faced with strong national representative assemblies, were able to field massive armies (Russell 1971, pp. 298–310; Kiser 1987). In absolutist Spain, tax rates were much higher in Castile (where the representative assembly was weak) than in Aragon, Valencia, or Catalonia (where representative assemblies were strong) (Myers 1975, pp. 60–65; Kiser 1987).

<sup>44</sup> Other structural factors also influence state policies directly and mediate the relationship between autonomy and policies by constraining the choice sets of actors. Although we realize the importance of these factors, in order to simplify our argument they will not be discussed.

<sup>45</sup> The cost of making any general, a priori assumptions about the interests of actors is some loss of descriptive accuracy. For example, since some political actions are normatively or emotionally motivated, no rational choice theory will provide an accurate description of all state policies. This is the price that must be paid for a testable general theory. However, Weber (1968, p. 21) points out that the use of the rational choice assumptions can facilitate the study of normative and emotional bases of action, since these are highlighted as anomalies by a precise model.

counts to specify the interests of actors. Although both often state that actors are purposive and self-interested (Skocpol 1979, pp. 29–32; Skocpol 1985, p. 15; Mann 1977, p. 286; Mann 1986, pp. 4, 29–30), they neither use these assumptions consistently nor make the additional assumptions about goals necessary to produce precise empirical implications. For Skocpol, rulers sometimes act in their own material interests (1979, pp. 29–30, 48) and sometimes act on “society’s behalf” (Skocpol and Ikenberry 1983, p. 98), and at other times their actions are shaped by cultural factors (Skocpol and Ikenberry 1983, pp. 91, 108; Skocpol 1988, p. 307). Since Skocpol provides no arguments about the general conditions within which these different interests will occur, her descriptions of particular state policies *cannot be tested*. Mann suggests that the goals of individuals are “not relevant” to his arguments and that the relationship between individual action and macro-level outcomes (such as state policies) is “too complex to be theorized” (1986, pp. 29–30). Rational choice theorists disagree and are attempting to specify general causal relations and mechanisms that produce state policies.

A comparison of explanations about the initiation of war, one of the most significant policies of any state, illustrates the importance of general micro-level mechanisms. Although war plays an important role in arguments made by Skocpol (1979) and Mann (1986), their lack of consistent and precise specifications of interests prevents them from developing a theory of war initiation. Mann sometimes explains war initiation in terms of material interests (1986, pp. 101, 252–55, 431–32; 1987, pp. 36–38) and at other times relies on normative/cultural specifications of interests (1986, p. 431; 1987, pp. 39–41). Skocpol’s (1988) most extended discussion of war initiation contains no general discussion of the interests of political actors. As a result of their lack of micro-level mechanisms, neither Skocpol nor Mann has developed testable explanations of war initiation.

Yet it is possible to combine models of autonomy with assumptions about interest to develop such a theory for absolute monarchies. War was a policy generally favored by absolute monarchs but opposed by many of their subjects (Kiser 1989). It stands to reason that autonomous kings are likely to enter into wars, for when these adventures are successful they add to the king’s patrimony, and when they are unsuccessful a large proportion of the costs of wars often can be shifted to subjects. Thus, Kiser, Drass, and Brustein (1991) have found that rulers in early modern Western Europe who possessed substantial independent resources were more likely to initiate wars than those who did not.<sup>46</sup>

<sup>46</sup> The fiscal policies and economic policies of states also are determined in part by state autonomy and can be analyzed with the same type of theoretical models and mechanisms (North and Thomas 1973; Kiser 1987; Levi 1988).

The second factor mediating the relationship between state autonomy and state policies is the ability of rulers to control state officials. Even rulers with high autonomy from social groups will not be able to pursue policies in their own interests if they cannot ensure that state officials will carry out their commands.<sup>47</sup> Both Skocpol (1979, p. 89; 1985, p. 16) and Mann (1984, pp. 205, 211; 1986) discuss this issue often in their accounts of state policies, but since neither has models or mechanisms, they do not provide a general theory of rulers' capacity to control officials.

The ability of rulers to control officials can be modeled with group solidarity (Hechter 1987) and agency theory (Jensen and Meckling 1976)—it is a function of resources, monitoring, and sanctioning. Levi (1988) argues that rulers will choose the most efficient available means of controlling state officials within the limits set by the power of corporate actors. Thus the rulers of republican Rome initially adopted tax farming because it was more efficient than its bureaucratic alternative, but retained it in later years (despite its growing inefficiency) because rulers had grown dependent on the resources of tax farmers. Moreover, Kiser and Tong (1989) show that variations in the level of corruption of state officials in Ming and Qing China can be explained by differences in the costs of measuring taxable assets, the monitoring capacities of rulers, and the level of officials' salaries.

State autonomy and the formation of state policies thus can be analyzed as the product of multiple, interacting agency relationships. When combined with the theory of group solidarity, agency theory provides a parsimonious model that is general enough to apply to the relations between social groups and rulers (the focus of Marxists and pluralists) and between rulers and state officials (the focus of Weberians). The causal mechanisms derived from these theories are plausible and generate relatively precise empirical implications. Some of these empirical implications have received support. Of course, different causal mechanisms derived from other general theories might one day provide superior explanations of these phenomena. Yet no causal mechanisms can be derived from induction alone; since they reject general theory, inductivists cannot construct comparable explanations that are both plausible and testable.

## CONCLUSION

Purely inductive comparative history runs the great risk of being considered inadequate both as history and as sociology. Historians reviewing books by comparative-historical sociologists often complain that their

<sup>47</sup> The inability of Tudor monarchs in England to enforce their economic regulations (North and Thomas 1973) and of rulers of Ming China to enforce fiscal policies (Kiser and Tong 1989) illustrates the problem.

broad canvas and reliance on secondary sources result in superficiality and misinterpretation (see Appleby 1979, pp. 337–38; Monas 1980, p. 300; Cameron 1981, pp. 343–45; Weber 1987, p. 852). Comparative-historical sociologists should be able to reply that in spite of these flaws—which can be minimized but probably never wholly removed in this type of research—their works do contribute to an understanding of the social world by providing general explanations of facts about diverse historical societies and cultures.

For reasons elaborated in this article, scholars who reject general theories cannot make this response and remain vulnerable to criticism from sociologists (and even some historians) to the effect that their explanations are too undeveloped and vague to have determinate empirical implications (see Dunn 1980, p. 67; Appleby 1979, p. 338; Calvert 1981, p. 93; Stinchcombe 1982; Tilly 1987, p. 630).<sup>48</sup>

To be sure, induction is necessary in comparative-historical research. The evidence that is uncovered by inductive methods is essential both for the establishment of causal relations and for the assessment of the appropriateness of alternative causal mechanisms. Although causal inference is especially problematic in historical research, comparative historians also need to pay much greater heed to the mechanisms that produce the causal relations revealed by their empirical research. An exclusive reliance on the inductive method has led many contemporary scholars to ignore the vital role of causal mechanisms in historical explanation.

It is time to redress the methodological imbalance, caused by an over-reliance on inductivism, that has swept comparative-historical sociology. The role of causal mechanisms will continue to be ignored in an intellectual climate in which the importance of general theories is denigrated.

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<sup>48</sup> Needless to say, not all the reviews of this work have been negative, and even the cited reviews sometimes praise certain features. These reviews are cited not to imply that this research is of poor quality but simply to indicate some shared problems that result from the rejection of general theory.



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# Accounting for Rationality: Double-Entry Bookkeeping and the Rhetoric of Economic Rationality<sup>1</sup>

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This article addresses claims made by Weber, Schumpeter, and Sombart concerning the importance of double-entry bookkeeping. They argue that accounting played a key technical role in enhancing rationality and furthering the development of capitalist methods of production. The history of accounting methods and practices from the Middle Ages to the 19th century is surveyed in order to evaluate these arguments. Two important dimensions of accounting are discussed: the rhetorical and the technical. The argument is that, as rhetoric, accounting must be understood as an attempt to convince some audience of the legitimacy of business ventures. Goody's analysis of writing and literacy is applied to the development of accounting as a technique. As a practical method, double-entry bookkeeping appears to have increased "rationality," but the rhetorical side of double entry is also critical. The conclusion is that the significance of double-entry bookkeeping can be appreciated only if its rhetorical and technical aspects are considered.

## DOUBLE ENTRY, RATIONALITY, AND CAPITALISM

What advantages does the Merchant derive from Book-keeping by double-entry? It is amongst the finest inventions of the human mind. [GOETHE]

Accounting is hardly a glamorous activity; repetitious, detail oriented, and methodical, it is not a subject that quickens the pulse. Accounting, it seems, is as exciting as adding up a long column of numbers. Perhaps

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this image explains its neglect by sociologists. Yet some dramatic claims have been made about the relationship between accounting and both rationality and capitalism by such prominent social theorists as Weber, Sombart, and Schumpeter. The common thread in these claims has been the idea that the emergence and development of accounting, as a practical technique used in business, is closely linked to the emergence of capitalism and the development of rationality. These are intriguing claims about such a seemingly innocuous activity.

Weber's discussion is the best known. Rational capital accounting is a crucial component of his definition of modern capitalism. In his words, "The most general presupposition for the existence of this present-day capitalism is that of rational capital accounting as the norm for all large industrial undertakings which are concerned with provision for everyday wants" (Weber [1927] 1981, p. 276). For Weber, "rational capital accounting" involves "the valuation and verification of opportunities for profit and of the success of profit-making activity by means of a valuation of the total assets (goods and money) of the enterprise at the beginning of the profit-making venture, and the comparison of this with a similar valuation of the assets still present and newly acquired, at the end of the process" (Weber [1956] 1978, p. 91).

Accounting makes it possible for capitalists to evaluate rationally the consequences of their past decisions. They can calculate exactly the resources currently available to them and those that will be forthcoming in the future. Capitalists can use the information provided by an account to assess and compare various alternatives for investments.

Rational capital accounting, in conjunction with calculable law, rational technology (mechanization), free labor, and the commercialization of economic life, is, for Weber, an element in a general process of rationalization that is both the precursor to and the consequence of modern capitalism.<sup>2</sup> Accounts use money as their unit, and, "from a purely technical point of view, money is the most 'perfect' means of economic calculation. That is, it is formally the most rational means of orienting economic activity" (Weber 1978, p. 86). Weber considered double-entry

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<sup>2</sup> Cohen emphasizes the centrality of capital accounting in Weber's framework: "The single most general presupposition of modern Western capitalism as Weber conceives it is that of rational capital accounting as the norm . . . [it] provides the lynch-pin that unites [calculable law and other necessary elements] as presuppositional foundations for the modern capitalist industrial enterprise" (Cohen 1981, p. xxxiii).



bookkeeping the most highly developed form of accounting (Weber 1978, p. 92).

The connection that Weber draws between double-entry bookkeeping and rationality and capitalism is echoed by others. Joseph Schumpeter argues that a "rational attitude" follows from economic activity in general. But, he says, "Capitalism develops rationality and adds a new edge to it in two interconnected ways. First it exalts the monetary unit—not itself a creation of capitalism—into a unit of account. That is to say, capitalist practice turns the unit of money into a tool of rational cost-profit calculations, of which the towering monument is double-entry bookkeeping. . . . We will notice that, primarily a product of the evolution of economic rationality, the cost-profit calculus in turn reacts upon that rationality; by crystallizing and defining numerically, it powerfully propels the logic of enterprise" (Schumpeter 1950, p. 123).

Like Weber, Sombart makes double-entry bookkeeping an important component of modern capitalism. "The very concept of capital is derived from this way of looking at things; one can say that capital, as a category, did not exist before double-entry bookkeeping. Capital can be defined as that amount of wealth which is used in making profits and which enters into the accounts" (Sombart 1953, p. 38). Furthermore, according to Sombart, "Through double-entry bookkeeping possibilities and stimulants were created so that the ideas inherent in the capitalistic economic system could come to full development: the ideas of acquisition and economic rationalism" (Sombart, quoted in Winjum [1972], p. 21; also see Sombart [1967], pp. 125–27).

The spread of double-entry bookkeeping is explained in terms of its technical superiority. Within the capitalist context, market competition (the "battle of man against man on the market") was for Weber "an essential condition for the existence of rational money-accounting" (Weber 1978, p. 93). For-profit enterprises would not survive if they were not sufficiently profitable (Weber 1978, p. 97). Enterprises that embraced the double-entry method enjoyed a technical advantage over those that did not, and, in the long run, the latter would be driven out of the market. Weber argued that, in the precapitalist context of antiquity, the use of slave labor made rational cost accounting impossible and that this was one reason why capitalism failed to develop in ancient society (Weber [1909] 1988, pp. 65–66).

Both Weber and Sombart, and, to a lesser extent, Schumpeter, postulate a close relationship between capitalism, rationality, and the development of double-entry bookkeeping. They emphasize that double-entry bookkeeping contributed to the historical emergence of a "rational worldview." Accounts constitute part of the conceptual tool kit that persons

in business use in reflecting on the consequences of their past decisions in considering present alternatives.

The central role played by accounting in rational decision making is also emphasized in modern accounting textbooks. Accounts provide technical information on the outcome of previous business actions (Littleton and Zimmerman 1962, pp. 5, 7, 50). They can render an accurate assessment of the relative success of particular investments and thereby facilitate the pursuit of higher profits (Istvan and Avery 1979, pp. 5, 8). Accounts also provide a record of current assets and so indicate to the businessman the economic means at his disposal (Chambers 1966, pp. 47, 81, 96). In both ways, accounts help make decision making more rational and so contribute to the maximization of profits (Chambers 1966, p. 341; Parker 1969, p. 15).

The affinity between accounts and rationality seems even more plausible if we consider standard models of rational choice. Rational choice, according to the utility-maximization model, involves the measurement of the subjective expected payoffs from a set of alternatives and the selection of that alternative associated with the highest expected payoff (Gardenfors and Sahlin 1988, pp. 1–13). What accounts provide is the information necessary to measure and compare the alternatives in the set. They allow someone to estimate the probabilities of success and the possible payoffs associated with the various alternatives.

Despite making these claims for the importance of double-entry bookkeeping, sociologists have done little to evaluate or document them. Economic historians and students of accounting history have done extensive work on the history and importance of accounting. But, with few exceptions, there has been little attempt to link this specialized history with the broader claims made by Weber, Schumpeter, or Sombart.<sup>3</sup>

In this article, we reconsider double-entry bookkeeping in the light of these claims about its general significance. We analyze the development of accounting and examine why various audiences have found accounting persuasive and how much the technical superiority of double-entry bookkeeping explains its diffusion.<sup>4</sup> Underlying our examination is the belief that the best way to understand such broad and sweeping historical changes as "rationalization" is to decompose them.

<sup>3</sup> Two exceptions to the former rule are B. S. Yamey (1964) and Sidney Pollard (1964, 1968), who both reject a strong version of the Sombart thesis. But see McKendrick (1970) for an argument against Pollard's.

<sup>4</sup> We do not assess whether the double-entry method accounted for the emergence of capitalism in Western Europe. This question can certainly arise, given the grand claims made on the behalf of double entry, but to answer it we would have to undertake a comparative analysis of European and non-European accounting history, and the evidence for the latter is simply much too sparse.

Our historical evidence is drawn largely from Italy and England. We selected these two countries because, for the period from the late Middle Ages to the 19th century, first Italy and later England were leaders in capitalist economic production and technique. In addition, we obtained a sample of accounting textbooks over many centuries through the Goldsmith's-Kress Library of Economic Literature.<sup>5</sup> From accounting textbooks we can learn both the state of the accounting art and the kind of claims that were made about double-entry accounting.<sup>6</sup>

We contend that rationalization, even as a general historical process, has an important rhetorical aspect.<sup>7</sup> The rationalization of life has been more than an overall increase in the "calculability" or rationality of decisions. It has also been a change in the rhetoric used to represent decisions. The commonsense meaning of the term "rationalization" highlights this aspect.<sup>8</sup> A double-entry account is an "account" or interpretive framing of some set of business transactions, and it has a rhetorical purpose.

Sociologists from many perspectives have appreciated the importance of how individuals frame, interpret, and understand their actions: People both act and provide accounts of their actions. From Weber and Giddens, we are reminded that the "subjective" interpretations put on acts are at least as important as the "objective" acts themselves. Sometimes the purpose of these frames is simply to make sense of an act, but frames are also important as a way to document or establish the *legitimacy* of action. When used this way, an interpretive frame constitutes a form of rhetoric: its purpose is not simply to inform but also to convince.

Double-entry bookkeeping is an interpretive frame that is not usually classified as rhetoric. Economic accounts are ordinarily considered a form of neutral, technical information. They allow the precise measurement of assets and liabilities and profits and losses that businesspeople need

<sup>5</sup> This library combines the holdings of Goldsmith's Library of Economic Literature (University of London) with those of the Kress Library (Harvard University). The Goldsmith's-Kress Library is probably the single best source for Western European economic and business history. Our sample consists of all the English accounting textbooks in this collection through the 18th century, as well as other translated texts.

<sup>6</sup> It is impossible to do a survey based on actual accounts. Only a few sets of accounts have survived, and even fewer are published or publicly available. Basil Yamey, the foremost scholar of accounting history, claims that there are fewer than 20 sets of account-books from the 1500–1850 period of British history that have been examined by historians (Yamey 1981, pp. 128–29). The situation is much worse for other European countries.

<sup>7</sup> By rhetoric we simply mean techniques that are used to make a convincing or persuasive argument. Kenneth Burke argues that the function of rhetoric is to induce action or the attitude that precedes it (Burke 1969, p. 42).

<sup>8</sup> This is consistent with Scott and Lyman's (1968) conception of accounts.

to make their profit-maximizing decisions. These are the attributes of accounting stressed by Weber, Sombart, and Schumpeter. Contemporary accountants and accounting historians agree on this image of accounting.<sup>9</sup> Accounts appear to have more to do with the rationality of decisions than with the rationalization of decisions. Our focus on the rhetorical dimensions of business accounts is in contrast to their presumed technical nature. Looking at a formal mode of interpretation whose rhetorical dimensions seem to be its weakest provides a rigorous test of the importance of rhetoric.

We also argue that the changes in accounting practices had important cognitive consequences. According to Sombart, the central idea of capital itself was engendered by double-entry bookkeeping.<sup>10</sup> Double-entry bookkeeping created new categories for classifying and evaluating business transactions. It was a technique that helped to organize and make sense of the business world. Consequently, the relationship between accounting and behavior was not a unilateral one: double-entry bookkeeping was devised to account for business transactions, but once established, it altered those transactions by changing the way businessmen interpreted and understood them.

#### RHETORIC AND DOUBLE-ENTRY ACCOUNTING

The present treatise will serve all their needs with regard to accounts and recording, and for this reason only do I insert it. I therefore intend to give sufficient rules to enable them to keep all their accounts and books in an orderly manner. . . . The second thing looked for in business is to be a good accountant and sharp book-keeper and to arrive at this, as we have seen above, we have regular rules and canons necessary to each operation, so that any diligent reader can understand all by himself. . . . The third and last thing necessary is that all one's affairs be arranged in good order so that one may get, without loss of time, all particulars as to the debit and also the credit of all of them, as business does not deal with anything else. This is very useful, because it would be impossible to conduct business without due order of recording, for without rest, merchants would always be in great mental trouble.  
[FRATER LUCAS PACIOLI (1494) 1924, p. 1]

<sup>9</sup> The rhetorical aspect of accounts is not something about which ordinary people are unaware. Personal income tax forms and company balance sheets are often modified to make someone look honest or profitable. But the rhetorical effectiveness of accounts is premised on their ability to look factual, objective, and neutral. It is these latter qualities that are usually used to characterize accounts.

<sup>10</sup> See our discussion above.

This is Pacioli's introduction to his famous treatise on the double-entry method, published in Venice in 1494. Pacioli's is widely recognized as the first and most influential textbook on the technique of double-entry bookkeeping (Taylor 1956, p. 182). Pacioli, a Franciscan monk and mathematician, did not invent double-entry bookkeeping, but his text provided a detailed exposition. The technique was developed by merchants in northern Italy sometime during the late 13th or early 14th centuries (Yamey 1956a, p. 1; Winjum 1972, p. 39).<sup>11</sup> What was characteristic of double-entry methods was the fact that all transactions were entered twice, once as a debit and once as a credit. As explained by Pacioli, the debit side pertained to debtors, while the credit side pertained to creditors (Pacioli 1924, p. 24). The distinction between debit and credit, however, has become largely conventional.<sup>12</sup>

An example can be found in the stock ledgers used to record transactions in the shares of the East India Company.<sup>13</sup> These ledgers were kept by the company, which used the double-entry method, and each shareholder had a separate account. Every sale or transfer of company stock between shareholders was entered twice: as a debit under the account of the seller and as a credit under the account of the purchaser (debits were recorded on the left-hand page, credits on the right). In general, accurately kept books would be in equilibrium: the sum total of debits would equal the sum total of credits. A trial balance could be used to ascertain the accuracy of the bookkeeping. Furthermore, the double-entry framework made it possible to keep accurate records of the amount of capital invested in an enterprise as well as of profits and losses (Yamey 1956a, pp. 7–8). One could precisely measure the extent of an investment and how it had performed.

Pacioli's text on double-entry bookkeeping had its own rhetorical agenda. He tried to convince his readers of the utility of this particular method of keeping books. More important, the method he prescribed could be used to convince skeptics of the legitimacy of commerce in general and of the integrity of the business enterprise in particular. James Aho (1985) shows how Pacioli's method of double-entry bookkeeping

<sup>11</sup> The Italian origins of double entry have been common knowledge for a long time. Colinson (1683, p. 1) explicitly attributes the method to them.

<sup>12</sup> For example, in modern American accounting, if a company purchases some inventory with cash, the transaction is recorded in the cash account as a credit and in the inventory account as a debit (Istvan and Avery 1979, p. 40). The terms debit and credit are purely conventional and do not connote a decrease or an increase. Yet the fact that the transaction is entered twice (as a debit and as a credit) means that the double-entry method is still being used.

<sup>13</sup> See, e.g., stock ledger D, covering the period from October 3, 1711, to June 24, 1715, India Office Library, L/AG/14/5/2.

corresponded in form to classic Ciceronian rhetoric.<sup>14</sup> The elements of an account, as set forth by Pacioli, were the *inventio* (the inventory), and the *dispositio* (memorandum, journal, and ledger). It was no coincidence that these corresponded exactly to the first two elements of an argument according to Cicero (Aho 1985, pp. 24, 25, 33). If Pacioli's methods were followed, the accounting books of a business would be structured as a convincing argument.

Pacioli also recognized the efficacy of pious invocations in establishing legitimacy and enhancing credibility. In his words, "The end or purpose of every business man being to make lawful, and fair enough profit to keep himself substantially; but he must always commence his affairs in the name of God, whose name must appear at the beginning of every manuscript, always bearing His Holy Name in mind" (Pacioli 1924, p. 4). This advice was well heeded by Italian merchants for centuries (Swetz 1987, p. 275; Yamey 1974, p. 143). Their account books invariably invoked the name of God and often appealed to the Virgin Mary and other relevant saints in elaborate visual presentations. English accounts were equally pious.<sup>15</sup> Sir Thomas Gresham's 1546 daybook began: "In the name of God, Amen. This present booke shalbe the Journall called + apperteyning to me Thomas Gresham of London mercer. . . . Pleaseth God to geve my profytt and prosperytye to defende me from evell fortune losse and damage. Amen" (Ramsey 1956, p. 189).

Concern for the legitimacy of business was partly engendered by the papal prohibition on usury. It was a sin to charge interest on a money loan. Underlying the prohibition against usury was a more general philosophy of justice informed by Aristotelian thought and Roman law (Noonan 1957, pp. 21, 30–31; Le Bras 1963, p. 564). As set forth by Thomas Aquinas, the natural essence of money was as a measure of value or intermediary in exchange. The increase of money through usury violated this essence (Le Goff 1988, p. 29; Nelson 1969, p. 69; Noonan 1957, pp. 52, 55). Furthermore, according to the same Thomistic analysis, a just transaction was one characterized by an equality of exchange (de Roover 1974, pp. 337–38), one where each side received exactly his due. Interest on a loan, in excess of the principal, would violate the balance of an exchange between debtor and creditor and was therefore unjust (Ramsay 1962, p. xlvi). Nicholas Oresme's influential 14th-century tract on money

<sup>14</sup> It may seem odd and somewhat arbitrary to the modern reader that Pacioli would be concerned to frame his text on accounting in terms of classical rhetoric. But in the Middle Ages, rhetoric often served as a paradigm for knowledge, theology, and ratiocination in general (see McKeon 1942, pp. 11, 32).

<sup>15</sup> See, e.g., Coleman (1963, p. 3); Peele (1569); Hawkins (1689, p. 10); North (1714, p. 22); Webster (1735, pp. 14, 29).

is an example of an Aristotelian analysis.<sup>16</sup> Oresme argued that "it is natural for certain natural riches to multiply, like grains of corn. . . . But it is monstrous and unnatural that an unfruitful thing should bear, that a thing specifically sterile, such as money, should bear fruit and multiply of itself. . . . It is by this reasoning that Aristotle proves . . . that usury is against nature, because the natural use of money is as an instrument for the exchange of natural wealth, as has frequently been said. Anyone therefore who uses it otherwise, misuses it" (Oresme [1355] 1956, pp. 25–26).

Through debit and credit, double-entry bookkeeping explicitly documented the balanced nature of the transactions of a firm, thus proving the legitimacy and justness of the business. "The conclusion of the balance sheet, then, is not simply that such and such is the net worth of our business, but rather that such profit is morally legitimate. And it is so, because it arises from a fundamentally equitable and balanced transaction" (Aho 1985, p. 33). An account that followed Pacioli's method of double entry would provide a powerful argument in favor of the legitimacy and integrity of a firm and its profits (Le Bras 1953, p. 560).

The rhetorical issues that Pacioli addressed have largely disappeared. Usury is no longer morally suspect,<sup>17</sup> and business is accepted as a right and proper activity. Yet accounting has remained a rhetorical device; an account still attempts to convince someone of something. What has changed over time is the message and its audience.

Between Pacioli and the 19th century, there were few changes in accounting theory (Winjum 1972, pp. 40, 108; Chatfield 1977, p. 52). There was a general theoretical consensus that the double-entry method was superior because it could solve so many accounting problems simultaneously. The double-entry method faced no serious rivals (Jackson 1956, p. 288). The methods described in Pacioli's work are essentially the same as those set forth in Hugh Oldcastle's 1588 text. Almost two centuries after Oldcastle, William Taylor's book (1783) on "practical arithmetic" described the identical method. The one major attempt to introduce a new method of accounting into England occurred at the end of the 18th century and was a resounding failure (Yamey 1956*b*, pp. 313–14).

Despite this theoretical consensus, accounting practices were remarkably varied. Merchants in the 16th and 17th centuries seldom maintained the high standards of the double-entry method. Sometimes, for example, single-entry methods were adequate (Yamey 1964, pp. 118–20). When

<sup>16</sup> For the original argument, see Aristotle (1962, p. 22).

<sup>17</sup> Usury was, however, still an issue well into the 17th century in England, as the goldsmith bankers who charged Charles II interest in excess of the legal limit discovered (see Roseveare 1962, p. 173).

double entry was used, it was often sloppily done. Accounting practices varied across countries, industries, and individual firms. The application of double-entry accounting depended, in part, on its audience. This audience shifted in general from the proprietor alone to a larger more dispersed group of partners, coinvestors, shareholders, and even eventually the state, as capitalist forms became more sophisticated.

## RHETORICAL APPEALS TO CHANGING AUDIENCES

But in practice, Accompting is an Art of it self distinct; and  
Arithmetick to Book-keeping, is as Language to Oratory.  
[ROGER NORTH 1714]

For as long as people have bought and sold, they have kept records. Accounts in some form or other go back at least as far as 2300 B.C. in Egypt (Stevelinck 1985, pp. 11–13). Early medieval European accounts were simply crude narrative descriptions of transactions (Boyd [1905] 1968, p. 54; Yamey 1962, p. 19). An example of an English account from the early 14th century shows just how narrational early accounts could be:

Account of Maurice Hunter and Fynlay Sutor, bailies of the burgh of Strivelyn, given up at Dunbretan on the twenty-fifth day of January, in the year of grace above mentioned [1328], of the fermes of the said burgh for the two terms of this account. They charge themselves with £.36 received on the account of the fermes of the said burgh for the year of their account. Whereof, for their superexpenses made in the preceding account 40s. 1d. halfpenny. And in the duties to the abbot of Cambuskyneth and Dunfermelyn, the hospital of Strivelyn and the hospital of Torphichen, during the time of the account, £.23, 5s. 4d. And to the Friars Preachers of Strivelyn of the yearly alms of the king, 10. And for the building of a certain house for a kitchen for the use of the king, 53s. 4d. And in sundry carriages during the time of the account, 26s. 8d. Sum of this outlay, £.39, 5s. 5d. and a halfpenny. And thus they superextended 65s. 5d. and a halfpenny. [Quoted in Boyd 1968, pp. 47–48]

An account such as this was basically a rambling story with numbers. All kinds of information were presented and none of it in a tabular fashion. Italian accounts before the advent of double entry were equally narrational (Lee 1973, p. 137).

Early accounts served mainly to assist the memory of the businessman. Names, dates, the nature of the transaction, the transacting parties, and other details (some seemingly irrelevant to the modern mind) would be noted. Persons with long-term obligations, complex transactions, or simply poor memories would use accounts as little more than mnemonic devices (de Roover 1956, p. 173). For his entire life, the writer Jonathan



Swift kept detailed accounts of his daily expenditures for no other reason than to have the information recorded (see Thompson and Thompson 1984, p. vii). In this case, the audience for the account was the proprietor or record-keeper alone. The account answered two questions: What do I own? and What have I done?

Concern with divine approval characterizes the accounts from the Middle Ages through the 18th century, which were often pointedly directed to a divine audience. Weber summarizes early merchants' precarious spiritual status with the adage "*Homo mercator vix aut numquam potest Deo placere*" (he may conduct himself without sin but cannot be pleasing to God; Weber 1981, p. 357). The frequent references made to God were more than a cynical attempt to provide divine legitimation for a set of mundane activities. They reflected the sincere hope of those keeping the books that they were gaining God's blessing and approval. God was invoked and appealed to directly.<sup>18</sup> In 1588, Hugh Oldcastle stated that "it behoveth him [the merchant] first in all his workes and busines to call to minde the name of God in all such writings, or in any other reckonings, that he shall beginne" (Oldcastle 1588, chap. 2). Christophle's 1547 work made similar claims (Christophle [1547] 1927, pp. 264–65). Likewise, the merchant Francesco di Marco Datini began each ledger with "In the name of God and of Profit" (Origo 1957, pp. 13, 114). As late as the 18th century there were frequent references to God.<sup>19</sup> Hatton's examples in his 1712 accounting textbook contained such references. His sample ledger opens: "*In the Name of God. Amen*" (Hatton 1712, p. 176; italics in source). His sample waste-books open in a similarly pious fashion. Early companies also sought God's blessing. The first cashbook of the Bank of England (established in 1694) opens with a pious *Laus Deo* (Giuseppi 1966, pp. 68–69). Divine approval was both a corporate and an individual matter.

For a time, double-entry bookkeeping was recognized as a vehicle for self-transformation. Not only could it record transactions, it could also make you a better person. Pacioli did not make these kinds of claims,

<sup>18</sup> A good example of an exordium comes from the ledgers of the Florentine company of Filippo Corbizzi, Jacopo Girolami, and Tommaso Corbizzi (1332–37): "In the name of God and of the blessed Virgin Mother Madonna St. Mary, and of St. John the Baptist and the Evangelist and of all the Saints, male and female, of Paradise, that by their holy pity and mercy they will grant us grace for a holy, long and good life, with growing honor and profit, and the salvation of our spirit and body" (quoted in Yamey 1974, p. 144).

<sup>19</sup> By the 17th century, some of the religious doubts concerning business were disappearing. In 1635, William Scott wrote concerning: "*sancta avaritia*, a holy covetousness" (Scott [1635] 1953, p. 36). In Scott's mind, piety and profitability could be combined.

but later authors did. According to John Mair, "The theory of this art or science is beautiful and curious, very fit for improving the minds of youth, exercising their wit and invention, and disposing them to a close and accurate way of thinking" (Mair 1757, p. vii).<sup>20</sup> Conversely, failure to adhere to this method aroused suspicion regarding one's character and resulted in degeneration. Those who neglected the method were "slothful" and "ignorant" and would suffer unfortunate consequences: "First, it causes trouble in mind and disquietness of body with hindrance in substance. Secondly, it is great shame and dishonesty to him that keeps not his book exactly. Thirdly, the evil keeping thereof so vexes the body that it breeds fevers and diseases" (Christophle 1927, p. 296). In 1711, Joseph Addison wrote in *The Spectator*: "This phrase [he has not kept true Accompts] . . . bears the highest Reproach; for a Man to be mistaken in the Calculation of his Expence, in his Ability to answer future Demands, or to be impertinently sanguine in putting his Credit to too great Adventure, are all Instances of as much Infamy, as with gayer Nations to be failing in Courage or common Honesty" (Addison [1711] 1965, pp. 187–88).

The transformation of self wrought by double-entry bookkeeping was, not surprisingly, conducive to capitalist activity. Its use signaled a prudent, disciplined mind. Its neglect signaled character weaknesses. Cast in these terms, the debate over double-entry bookkeeping became personal and moral. These normative arguments about the personal value of the double-entry method reflect a recognition of at least some aspects of what Weber characterized as a "rational ethos." Cautious, informed decision making and the avoidance of speculation, values promoted by double-entry bookkeeping (see Monteage 1690, preface), became celebrated values and a crucial feature of advanced capitalist societies (Weber 1976, p. 76).<sup>21</sup>

Double-entry bookkeeping also became an important resource in managing principal-agent relations. Businessmen who had to rely on others to help them manage their affairs were naturally concerned to know

<sup>20</sup> In the 17th century, Sir Josiah Child made a similar, but more general, claim about the virtues of arithmetic: "Besides, it hath been observed in the nature of Arithmetick, that like other parts of the Mathematicks, it doth not onely improve the Rational Faculties, but inclines those that are expert in it to thriftiness and good Husbandry" (Child 1668, p. 5).

<sup>21</sup> Weber was adamant that cultural components were essential to the emergence and development of capitalism: "In the last resort the factor which produced capitalism is the rational permanent enterprise, rational accounting, rational technology and rational law, but again not these alone. Necessary complementary factors were the rational spirit, the rationalization of the conduct of life in general, and a rationalistic economic ethic" (Weber 1981, p. 354).

whether or not they were being cheated. An international bank like that of the Medici family had agents in cities all over Europe. Such banks needed to determine the fidelity, honesty, and capability of their agents, as well as the state of their affairs (de Roover 1966, pp. 75, 84–85). For example, the Medici used audits as a vehicle for keeping track of large advances made by branch managers (de Roover 1956, p. 151). Similarly, English lords who hired managers for their estates were interested in the honesty of their subordinates (Stone 1962, p. 25; Davies 1968, p. 214), and merchants who had to rely on agents or “factors” in other cities needed to monitor distant transactions (Ramsay 1962, p. liii). Since the audience for the account was no longer directly involved in the relevant transactions, an account became more than just a mnemonic helper: it was now a primary source of information. Consequently, accounts had to be more systematic and complete and do more than just fill in the gaps in someone’s memory. A principal with many agents, such as the Medici bank, would require that the various accounts follow a standardized format. The accounts were arranged in a tabular fashion and transactions were grouped together under a common heading (e.g., “equity” or “expense”). “At first such records were kept in paragraph form: after an initial entry, some space was left blank for making one or two additional entries—for instance, to add interest—and for indicating how the settlement was made. . . . It was only gradually that all items concerning the same person were grouped together so as to form a running account. This result was achieved at first by leaving more space for additional entries and later by adopting the bilateral form” (de Roover 1956, p. 116). The audience for the accounts was separate from the record keeper. The question that this use of accounts answered for this audience was, *Am I being cheated?*

Double-entry bookkeeping could answer these new sets of questions. It provided organized books that could and did satisfy the need for simple mnemonic records or for documentation of an agent’s honest service (Winjum 1972, p. 82; Lane 1977, pp. 180, 184). Suitably bolstered with appeals to God, it could also satisfy the need to receive divine approval. But such rhetorical uses did not fully exploit the potential of double-entry methods. The double-entry method could also be used to satisfy the concerns of parties with whom a businessman had transactions. Such persons would be concerned to know that they paid fair prices, or that loans would be repaid, or that goods were of sufficient quality.<sup>22</sup> If their fears

<sup>22</sup> Roger North put it rather nicely when pointing out the need for everyone with business dealings to have some knowledge of the double-entry method: “It is pitiful to see, how strangely some Men of Quality and Fortune, are to seek in Accompts; and how they are blinded and bambouled by the Mists, that artful Men raise up

were not assuaged, disputes and even litigation were the likely outcomes. James Peele, the author of one of the earliest English textbooks on double-entry accounting, said in the preface to his 1553 edition that "it is to be thought that true and perfect reconyng, is one of the chief, the lack whereof, often tymes causeth, not onely greate discension, but also is an occasion of greate losse of time, and empoverishment of many, who by lawes, seke triall of suche thynges, as neither partie is well hable to expresse, and that for lacke of perfect instruccion in their accompt, whiche thyng might, if that a perfecte ordre in reconyng were frequented of all men, right well be avoided" (quoted in Murray 1930, p. 222). For Peele, as also for Christophle (1927, p. 264), the double-entry method could save time and litigation by reducing suspicion and ignorance. It allowed a perfect and unambiguous "reconyng."

Writing from Naples in 1458, Bennedetto Cotrugli's advice book to merchants summarizes several of the virtues associated with good record keeping in general and double-entry bookkeeping in particular. In a section in which he described the double-entry method, Cotrugli ([1458] 1961) exhorts:

We shall turn to the practice of [keeping] records. These not only preserve and keep in memory [all] transactions, but they also are a means to avoid many litigations, quarrels, and scandals. And they also cause literate men to live thousands upon thousands of years. . . . Mercantile records are the means to remember all that a man does, and from whom he must have, and to whom he must give, and the costs of wares, and the profits, and the losses, and every transaction on which the merchant is all dependent. And it should be noted that knowing how to keep good and orderly records teaches one to draw contracts, how to do business, and how to obtain a profit. And undoubtedly, a merchant must not rely upon memory, for such reliance has caused many persons to err. [P. 375]

Cruder forms of accounting were inadequate for the problems created by business ventures involving multiple investors. Double-entry bookkeeping first emerged in northern Italy, where mercantile capitalism developed. According to Schumpeter, capitalism as an economic system based on credit creation first appeared there (Schumpeter 1939, pp. 223–24). Trading ventures began to require more capital than a single individual was willing or able to invest. Partnerships and joint ventures, in which capital was pooled from different sources, needed a more rigorous method of bookkeeping. It became necessary to keep track of the exact amount of an investor's share in the capital and revenues of a firm (de

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before their Eyes, with Estimates, as they call 'em, and Representations of Values, drawn out of immense Books of Accompts, while the proper Judges know the Way neither into, nor out of them, and listen to the Jargon, as if it were Coptick, or Arabick" (North 1714, p. 7).

Roover 1956, p. 115).<sup>23</sup> Some commercial voyages had as many as 25 sponsors, and it was common for a clerk to be hired for the sole purpose of maintaining an accurate account of all the income and expenses associated with the venture. By the 13th century, the role of accounting was substantial enough to prompt a number of maritime cities to enact laws requiring ships to employ a scribe as a permanent member of the crew; Venice and Barcelona required big ships to employ two scribes. The ships' scribe had an official status, and his records were deposited with the government; in the case of a dispute, these were considered legal evidence (Byrne 1930, pp. 59–61). The audience for accounts was now a multiple one: a group of partners or investors. Their question was, What is my fair share of the revenues? (Littleton 1933, p. 153).

Concomitantly with the increase in the size of cooperative ventures came an increase in their longevity. Early mercantile partnerships often lasted for only one voyage. The firm was dissolved when the ship literally "came in" (Coornaert 1967, p. 257). Total assets were liquidated and profits and capital were divided among the investors. As commercial ventures became less ephemeral, the corporation and the firm's capital had to be maintained. According to its original charter of 1600, the British East India Company was to operate for only a few voyages. At the end of these, dividends to shareholders liquidated the capital and divided up the profits. Only when the firm was rechartered in 1657 was it established as a permanent, ongoing enterprise. After that, dividends could be paid out of profits *only* (Chatfield 1977, pp. 79–80; Coleman 1963, p. 19). Capital had to be preserved to allow the firm to continue operations (Winjum 1972, pp. 214–20; Littleton 1933, p. 211). The now-necessary distinction between capital and profits could be maintained by using double-entry accounting.

The change from sole proprietorship to partnership created another problem for businessmen and their accounts. As a proprietor, one need not be concerned with making a clear distinction between business affairs and private or personal ones. Living and trading were not separate spheres of activity, and the specific source of an expense or revenue was of little consequence (Littleton 1933, p. 86; Ramsey 1956, p. 201; Coleman 1963, p. 204). This distinction becomes problematic when more than one person has invested in a firm (Yamey 1964, p. 127). Business and personal affairs must be kept separate if an investor is to avoid having

<sup>23</sup> Indeed, Colinson credits double entry for the rise of joint-stock companies: "And its obvious to all Considering persons that this honourable and profitable Science of Book-keeping is the only help, that encourages many to joyn their small stocks together, and by so doing, often from a small foundation Erects a most admirable Trade" (Colinson 1683, p. 1).

the capital and income of his firm diverted to someone else's personal use (Weber 1981, pp. 226–28). Double-entry accounts could easily be used to maintain this distinction. A withdrawal of company funds by a partner had to be classified appropriately as a reduction in one's investment or as taking one's share of the profits, rather than as a business expense.

The development of joint-stock companies created wider audiences for accounts, ones even less familiar with the operations of a company. Furthermore, investors often diversified into a number of different ventures, making firsthand knowledge of these even less likely (Yamey 1962, p. 39). More than ever, they relied on accounts to provide the requisite information.

During the 19th century, two important changes occurred that influenced both accounting theory and accounting practices. First, with the Industrial Revolution came permanent, large-scale, fixed-capital investments. Fixed capital complicated the accounting task in two ways. It required that depreciation be incorporated into the valuation of assets, and it made the periodicity of business more arbitrary (Chatfield 1977, p. 92). Fixed capital is continuous capital. Since no ship arrives to signal that it is time to balance accounts and calculate profits, there is no "natural" period of production. Hatfield points out that "the use of fixed capital on a large scale increases incalculably the difficulty of determining the profits earned in any given year . . . [since] business is a continuum" (Hatfield 1968, p. 10). Consistent allocation of expenses and revenues to artificial accounting periods became necessary.

Second, with the advent of the railroads, depreciation was recognized as an important issue. People realized that the values of the large investments made in machinery, rolling stock, and rails were declining as a result of physical wear and tear (Littleton 1933, p. 223; Chatfield 1977, p. 95). As was true of any large fixed-capital investment, unless depreciation was accounted for, capital would not be maintained. Nonetheless, depreciation practices were varied and unsystematic throughout the 19th century. For example, there was little consensus about how to depreciate assets, and depreciation charges might not be counted during unprofitable years (Brief 1976, pp. 73, 106).

The 19th century also witnessed a great expansion in the numbers of joint-stock companies that brought together capital from a large number of investors. More than ever, it was necessary to keep track of capital and distinguish it from income. The greater salience of joint-stock companies brought about the second major change of the 19th century. Political pressure from shareholders and creditors brought about limited government intervention.

Government regulation mandated accounting standards for corpora-

tions. For example, England's Joint Stock Companies Act of 1844 required companies to present a "full and fair" balance sheet at the shareholders' meeting. This would, some believed, reduce the fraud and mismanagement that was prevalent (Edey and Panitpakdi 1956, p. 357). The statutes of 1844 and 1862 required that dividends be paid out of profits and that the capital of the firm be maintained (Littleton 1933, p. 214). It was particularly important that corporations with limited liability keep their capital intact. The legal rights of creditors would be infringed, if dividends in any way impaired capital (Littleton 1933, p. 240). The Regulation of Railways Act of 1868 forced British railway companies to render accounts twice yearly according to a uniform standard set forth in the act (Glynn 1984, p. 113; Littleton 1933, p. 235). More generally, the Companies Act of 1900 mandated compulsory and uniform annual audits for all registered companies (Edey and Panitpakdi 1956, p. 371). Such legislation helped to standardize accounting practices and underscore the essential distinction between capital, income, and profit. Here, the audience for accounts had been expanded to include the state. Accounts were now *legally* required to answer the questions, Are investors being cheated? and Is capital being maintained?

From the mercantile capitalism of the 15th century to the industrial capitalism of the 19th, accounting audiences (including divine beings) changed dramatically. In part, this involved a shift from particular and personalistic audiences (e.g., a business partner) to general and institutionalized audiences (e.g., a market) that coincided with the developing forms of the capitalist enterprise. Nearly all the demands made for accounting information by these disparate audiences could be met within a single framework: double entry. Accounting practice that adhered rigorously to the canons of double entry could maintain the distinction between capital and income that 19th-century law required and that co-investors in joint-stock companies demanded. It could also sustain the distinction between private expenses and corporate costs that partners would insist on. Double entry could certainly serve as an accurate record of business transactions or as a means to evaluate past investments. From the Middle Ages to the end of the 19th century, double entry has been *the* accounting method.

Rhetorical appeals to some audience remain an important component of contemporary accounting. Examples abound of accounts that have been manipulated to convey a desired impression, legitimate someone's performance, or bolster a particular position. For example, measurement of internal costs is not simply an objective undertaking; cost figures can be highly contestable and may be as much the outcome of intrafirm politics as they are a reflection of the actual situation (Covalesski and Dirsmith 1986, p. 195; Dalton 1959, pp. 31–32; Meyer and Rowan 1977,

pp. 350–51). Managers also try to negotiate numbers that will make them look good. Legitimacy is an important issue in managing intrafirm transfer prices (Eccles 1985, p. 81). Accounts are used to justify decisions and to excuse mistakes (Watts and Zimmerman 1979). Income numbers are sometimes artificially smoothed in order to enhance the retrospective appearance of predictability and certainty or to signal expectations (Barnea, Ronen, and Sadam 1976, pp. 110–11). During the conglomerate period of the 1960s, accounts were manipulated by financiers to project an image of perpetual growth in earnings (Espeland and Hirsch 1990, pp. 82–87). Corporate accounting standards are shaped by the interests of management (Watts and Zimmerman 1978). Such conflicts over numbers are unlikely to be permanently resolved since there is no objective way to measure such economic activities. Accounting standards are conventional, and remain arbitrary to a degree. They are neither right nor wrong, but only “generally agreed upon.”

Double-entry bookkeeping was able to satisfy so many demands of such divergent audiences in part because it is an abstract, formal system. This permitted the contents of the various categories to change as situations required, without the general framework's having to be reconceived. For example, Pacioli could never have anticipated double entry's ability to incorporate depreciation of fixed-capital assets. Yet, within the framework, depreciation could be defined as a particular kind of debit whose formal position in a set of accounts was no different from any other debit. Such abstraction brought with it great flexibility. Double-entry bookkeeping, as part of all businessmen's common stock of knowledge, was a handy solution, one easily adapted by numerical *bricoleurs* to new problems that emerged.<sup>24</sup>

#### AUDIENCE AND THE INSTITUTIONAL CONTEXT FOR DOUBLE-ENTRY BOOKKEEPING

To explain the spread of double-entry bookkeeping and the consensus about its superiority that developed requires an understanding of its institutional context. The commercial schools that flourished during the 14th and 15th centuries in northern Italy were important catalysts in the diffusion of the technique. These *scuola d'abbaco*, or schools of the abacus,<sup>25</sup>

<sup>24</sup> This conception of the double-entry method conforms with Swidler's conceptual prescription for culture. She argues that culture shapes action by determining the repertoire or “tool kit” out of which individuals create lines of action (Swidler 1986).

<sup>25</sup> Although its original reference was to the abacus, in Italy *abbaco* was used in a general sense to refer to anything related to computational skill, particularly as applied to mercantile problems (Van Egmond 1976, p. 10; Goldthwaite 1972, p. 413).



first appeared during the 13th century and eventually spread north along the major European trade routes (Swetz 1987, p. 21). In 1338, Florence had six such schools. By 1613, Nuremburg had 48 schools (Swetz 1987, p. 17). After having learned reading, writing, and rudimentary Latin, boys aged 10 or 11 were sent to these (mostly private) secondary schools to study commercial arithmetic. They were taught multiplication, division, fractions, the rule of three, and the principles of monetary systems by the *maestro d'abbaco*, the reckoning master, or one of his tutors (Van Egmond 1976, p. 126–28; Goldthwaite 1972, p. 425).

It is not clear exactly when double-entry bookkeeping was introduced into the curriculum. Before the 14th century, accounting was probably taught during the future merchant's apprenticeship. However, after 1500, the proliferation of treatises on accounting suggests that it was probably included in the formal curriculum of these schools (Goldthwaite 1972, p. 425). The education received at the *scuola d'abbaco* was practical and thorough. After completing this education, most boys were apprenticed for several more years to apply their mathematical skills or to learn other aspects of commerce. It was common for Venetian and Florentine merchants to send their sons to foreign branches of the family firm to serve as apprentices (Van Egmond 1976, p. 65). In England, young merchants typically got their training either through apprenticeship or at a commercial school. Regardless of where they were taught, young men were sure to learn the double-entry method (Charlton 1965, pp. 253–54, 259–62).

Florence was a center of abacus studies and probably a training center for the *maestri d'abbaco* (Grendler 1989, pp. 22, 308; Van Egmond 1976, p. 81). These reckoning masters were sought out by students who came from all over Europe to study with them. Theirs was a lucrative profession, and they enjoyed a respected status in the mercantile community (Swetz 1987, p. 283). Weber reports that, as late as the 16th century, German clerks would travel to Venice to study double-entry bookkeeping (Weber 1981, p. 225).

In addition to reckoning schools and apprenticeships that trained young men in commercial arithmetic and accounting, there was, during the late 15th century, a proliferation of accounting textbooks that also helped to diffuse the double-entry method.<sup>26</sup> Virtually no handbooks or guides for the young businessman described any other method. Beginning in the late 13th century, a distinctive genre developed that catered to the computational and accounting needs of merchants (Van Egmond 1976,

<sup>26</sup> In Italy, the first commercial arithmetic book was published in 1481 in Florence (Chiarino's *Questo e ellibro che tracta di Mercantantie et usanze de paesi*) only 17 years after printing first arrived in Italy (Smith 1923, p. 249; 1908, pp. 10–11).

pp. 12–13, 301; Goldthwaite 1972, pp. 432–33; Weber 1981, p. 224). Unlike most books, these were written not in Latin but in the vernacular languages of their intended audiences. They were written in a colloquial, idiomatic style, as though a conversation had been transcribed. They dealt almost exclusively with demonstrating the techniques in question and providing examples and problems using practical applications. In contrast with other arithmetic treatises, these provided no underlying mathematical theory for the techniques discussed, and problems were often illustrated with simple drawings. With these books, it was possible for a merchant to teach himself the arithmetic and the accounting technique he needed to conduct his business. Merchants often collected large personal libraries that included many of these practical guides to mathematics (Rose 1973). Swetz (1987, p. 288) suggests that merchants were the first occupational group in Europe to acquire professional libraries composed of references specifically written for their trade. A flourishing publishing industry emerged in northern Italy that helped to spread these “how to” books for merchants. By the end of the 15th century, in Venice alone, there were 268 printing establishments (Swetz 1987, p. 26). This genre soon spread to other European countries, including Germany, France, Portugal, and England (see, e.g., Malynes 1636, p. 5; Hill 1688, p. 48).

The result of such intensive training and the availability of books catering to mathematical concerns was, not surprisingly, the creation of a sophisticated numerate audience. Merchants prided themselves on their arithmetic skill and took pleasure in applying it in varied contexts (Goldthwaite 1972, p. 433). For example, Baxandall (1972, pp. 86–104) shows how merchants’ skill at proportions and geometric computations influenced the style and appreciation of 15th-century art. Goldthwaite (1972) describes the traits characteristic of Florentine merchants as “their extraordinary penchant for writing everything down, from petty expenses to the history of their city; their passion for keeping their personal arithmetic straight with the symmetry of double-entry bookkeeping; their fascination with the purely mathematical problems of these treatises, and finally their taste for perspective and the mathematical organization of space in art and architecture—all are part of a single intellectual whole with a strong mathematical flavor” (p. 433). These attributes could be found among the merchants from other areas as well (Tucci 1973).<sup>27</sup>

As an interpretive frame for a set of economic transactions, business

<sup>27</sup> Grendler summarizes the meaning of bookkeeping as follows: “Bookkeeping was more than a technique for keeping track of transactions. It expressed the Renaissance merchant’s almost naive belief that life would be profitable and good if he could organize rationally and record everything” (Grendler 1989, p. 322).

accounts are distinctive in their being written down in an almost completely numerical form. The legitimacy of numerical evidence is today completely taken for granted (such evidence is considered more objective and factual than other, more qualitative, forms of evidence).<sup>28</sup> But this was not always the case. The ability of numerical representations to form the basis for a convincing argument depended on the literacy and, especially, the numeracy of the audience (Cohen 1982, pp. 50, 105–7). Illiterate and innumerate audiences did not find numerical evidence especially convincing.<sup>29</sup> Historically, merchants and traders have been among the most literate and numerate groups in society, and so their appreciation for accounts is understandable (Thomas 1986, p. 111; 1987, p. 106; Cohen 1982, p. 16; Swetz 1987, p. 20). At the same time that audiences for accounts expanded beyond the business community, the levels of literacy and numeracy in the general population were rising. Once literate and numerate, these wider audiences were more easily persuaded by accounting information.

Businessmen were encouraged to adhere to the double-entry method by more than just their upbringing. Their dependence on credit meant that they were especially vulnerable to the expectations and standards of other businessmen. One's credit depended on one's reputation.<sup>30</sup> Any doubts concerning a man's probity or solvency could quickly lead to a suspension of credit and then bankruptcy (Earle 1989, p. 120).<sup>31</sup> This was underscored in the advice books for businessmen that repeatedly emphasized the need for a good personal reputation and the extent to which careful record keeping could enhance such a reputation.<sup>32</sup> As we

<sup>28</sup> The pariah status accorded "anecdotal evidence" in contemporary social science is another manifestation of this bias.

<sup>29</sup> The growth in the respectability of numerical representations in England is indicated by the exchange between Jonathan Swift, in his *Examiner* of November 23, 1710, and Arthur Mainwaring, in his *Medley* of December 4, 1710, concerning the relative merits of the war currently being prosecuted by the British government. Both men use *stylized double-entry accounts* to represent the merits and disadvantages of the war. In this instance, double entry truly has a rhetorical dimension (see Ellis 1985, pp. 55–56, 74–76).

<sup>30</sup> As Tucci puts it in his discussion of Venetian merchants, "Even kings and princes could not have aspired to the trust and credit enjoyed by a good merchant. Reciprocal trust and good faith in their dealings were the ethical elements which distinguished the tone of relations between merchants and which were the most important factors in their solidarity" (Tucci 1973, p. 367).

<sup>31</sup> As Defoe put it, "Credit is the tradesman's life" ([1745] 1987, p. 137; for more on the importance of credit, see also pp. 51, 132.)

<sup>32</sup> Cotrugli is emphatic on this point: "The pen is an instrument so noble and excellent that it is absolutely necessary not only to merchants but also in art, whether liberal, mercantile, or mechanical. And when you see a merchant to whom the pen is a burden or who is inept with the pen, you may say that he is not a merchant. And [a good

have seen, double-entry accounts documented a man's frugality, acumen, and industry. With personal qualities such as these, a businessman could maintain both his reputation and his credit.<sup>33</sup>

The spread of the double-entry method was an instance of institutionalization. Two factors that commonly engender processes of institutionalization are professions and the state (DiMaggio and Powell 1983, pp. 150–52). But for accounting these were not important until well into the 19th century.<sup>34</sup> The early institutionalization of accounting was produced by two things: education and mercantile networks. The specialized education of merchants, either in schools or in apprenticeships, familiarized them with the double-entry method. Equally important were the facts that the merchants were highly mobile and that they were embedded in an international network of debtors, creditors, customers, and suppliers. As Zucker has pointed out, the density and coherence of social networks can be an important determinant of institutionalization (Zucker 1988, pp. 28–31). Commercial networks helped diffuse the double-entry method from Italy over the rest of Western Europe. Once the method was diffused, formal adherence to it was maintained by the fact that every businessman operated within the context of a network of other businessmen. Reputation and creditworthiness within the business community were necessary for solvency and were maintained with the help of one's accounts.<sup>35</sup> Hence, double entry acquired what DiMaggio de-

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merchant] not only must be skilled in writing but all must keep his records methodically . . . and therefore I warn and encourage any merchant to take pleasure in knowing how to keep his books well and methodically. And whoever does not know [how to do this], let him get instruction, or else let him keep an adequate and expert young bookkeeper. Otherwise your commerce will be chaos, a confusion of Babel—of which you must beware if you cherish your honor and your substance" (Cotrugli 1961, pp. 375, 377).

<sup>33</sup> In this regard, the role of double entry is akin to that of the "negotiated information order" discussed by Carol Heimer. Double-entry accounts may or may not be rational from the individual perspective of the businessman. But the use of double entry becomes explicable, given his dependence on a network of creditors and his need to maintain his reputation (see Heimer 1985, pp. 397, 411). We are grateful to a reviewer for calling her discussion to our attention.

<sup>34</sup> Thereafter they become very important. For example, accounting standards spread in the 19th and 20th centuries when they were given legal force. Passage of a law that prohibited certain methods of calculation, or that prescribed others, obviously influenced the diffusion of accounting techniques.

<sup>35</sup> This international commercial network gave rise to other institutionalized features of early modern business life. One of the most important was the Law Merchant, a body of international law specifically applicable to merchants and mercantile problems. The enforcement of commercial contracts was difficult, if not impossible, in ordinary courts of law. Commercial instruments like bills of exchange were often not recognized, and trade frequently occurred between legal jurisdictions rather than within them. The Law Merchant was disseminated through the trading networks

scribes as the taken-for-granted quality of institutionalized practices (DiMaggio 1988, pp. 4–5).

Feldman and March maintain that the information organizations generate is often more important for its symbolic value than for its direct relevance to decision making. They suggest that information gathering offers “ritualistic assurance” that choice is being guided by the appropriate values. Instead of providing a prescription for action, information more often symbolizes competence, displays authority, inspires confidence, and affirms not only the legitimacy of decisions made but the appropriateness of the social values of intelligent choice (Feldman and March 1981, pp. 177–78).

Earlier, Meyer and Rowan (1977) argued for the legitimizing power of rational organizational structure. They contend that the formal structure of an organization may bear only a slight resemblance to the actual activities and relations within it. This “decoupled” structure is often more important as a legitimizing symbol than as a blueprint for organizational relationships. To put it another way, the legitimating myth of rational structure is a form of rhetoric used to convince various audiences of the rationality of an enterprise. As such, it is “useful” in different ways than those suggested by more literal interpretations. In our case, double entry was certainly a “legitimizing myth” for business, one with important symbolic values decoupled from purely utilitarian concerns. However, double entry was also a genuinely useful technology, and its rhetorical features do not undermine this. But focusing exclusively on the superiority of its technical qualities jeopardizes an appreciation for its rhetorical, ideological qualities.<sup>36</sup>

For centuries accounting practice did not reflect accounting theory. There was little theoretical change in the 300 years after Pacioli, but it took a long time for the technique of double entry to diffuse throughout Europe and to become rigorously adhered to by most practicing businessmen (Winjum 1972, p. 108). Ideally, double entry facilitates the “economic rationality” described by Weber, Schumpeter, and Sombart and

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that linked merchants in various parts of Europe. For useful discussions of the Law Merchant, see Plucknett (1956, pp. 657–70) and Baker (1979). See Malynes (1636) and Marius (1655) for original expositions of the Law Merchant.

<sup>36</sup> In his analysis of a very different historical setting, the development of “market culture” in the French textile industry after 1750, William Reddy concludes by noting the rhetorical side of money: “Calculations with money values are always at bottom rhetorical in nature, part of a struggle over the structure of human relationships. But one of the strengths of this rhetoric is that the existence of a rhetorical dimension is not admitted. Market language poses as exact and objective” (Reddy 1984, p. 330). Reddy’s point is consistent with our own. We are indebted to a reviewer for pointing out this work to us.

modern accountants. In practice, however, the full potential of double-entry accounting was rarely exploited (see, e.g., Connell-Smith 1951, p. 369). Accounts were infrequently balanced (Coleman 1963, p. 203), and, when a trial balance was struck, total debits often did not equal total credits.<sup>37</sup> Assets were rarely revalued (Pollard 1968, p. 118). The full potential of double entry was seldom exploited and only gradually was the double-entry technique adhered to more rigorously. It was centuries before practice caught up with theory. This divergence has been noted by critics of Weber and Sombart who point to it as evidence against any close connection between the development of capitalism and accounting techniques. Nonetheless, this gap between theory and practice is consistent with the importance we give to the rhetorical side of accounting. A method that was unanimously championed in theory provided symbolic benefits. That it was not adhered to in practice suggests that the practical benefits (in improving the rationality of decisions) were, for a long time, less important.<sup>38</sup> As Meyer and Rowan indicate, organizations attending to symbolic criteria often behave differently from those that adhere strictly to efficiency criteria (Meyer and Rowan 1977, p. 355).

It is difficult to disentangle the separate symbolic and technical contributions that double-entry accounting provided. One example through which it is possible to assess the relative importance of the symbolic significance of accounting is that of the 18th-century English overseas merchants. These merchants had powerful incentives to gain as big a technical advantage over the competition as possible. First, the evidence from bankruptcy rates shows that the overseas trade was among the most competitive and risky business environments (Hoppit 1987, pp. 59–69). Centered mostly in London, overseas merchants were members of the most sophisticated group of businessmen. They were thoroughly aware of the double-entry method and, because of the competition, had a strong incentive to use the most advanced techniques. In addition, because credit was so important for business (Brewer 1982, pp. 200, 206; Earle 1989, pp. 115–18; Hoppit 1987, pp. 25, 134, 160), it was critical that accounts be kept accurately. In the case of bankruptcy, the only record of an obligation or claim was the account entry. Aspiring merchants were advised to keep accurate books, not only because doing so would enhance competitiveness but because, if the business failed, books were the only

<sup>37</sup> Writing in the 17th century, Dafforne stated that only three occasions required a general balance: when the books were full; when the merchant retired; or when the merchant died (see Dafforne 1636, p. 48).

<sup>38</sup> We are obliged to Randall Collins for this point.

way to sort out everyone's claims (Hoppit 1987, pp. 171–72).<sup>39</sup> Merchants did employ the double-entry method, and so most extant sets of accounts possess the debit-credit system characteristic of double entry. Yet, in spite of sound technical reasons for fully exploiting this method in a competitive environment that put a premium on efficiency, merchants' accounts were usually badly kept (Grassby 1969, p. 748).<sup>40</sup> Clearly, the technical advantages of double entry were subordinate to the symbolic ones.<sup>41</sup>

## COGNITION AND ACCOUNTING

A merchant rightly resembles a cock, which, among other things, is the most watchful animal that exists. [FRATER LUCAS PACIOLI 1924, pp. 10–11]

Till now, we have viewed the development of accounting as a changing response to changing demands for legitimacy. But this is only a partial view of its role. There is a causal efficacy in accounting that helped to transform the ways in which business was interpreted and understood (Meyer 1986, pp. 348, 354). To provide an account is to provide a classificatory scheme. It is a cognitive device that sorts, orders, and names. Accounts frame an economic reality in a particular way. This raises the possibility that accounting did not simply react to economic development or the changing demands of changing audiences; it helped to shape them.

As a written record, an account embodies some of the changes that

<sup>39</sup> As Colinson put it, "If he [the merchant] be fortunate and acquire much, it [double entry] directs him the way to Employ it to the best advantage, if he be unfortunate it satisfies the world of his just dealing, and is the fairest and best Apologie of his Innocence and honesty to the World" (Colinson 1683, p. 1).

<sup>40</sup> This is not the only instance in which businessmen failed to do the "rational" thing. Faulhaber and Baumol note that, for hundreds of years, businessmen discounted future incomes without having the correct discounting formula (Faulhaber and Baumol 1988, p. 578). Similarly, although arithmetic computations are much easier to perform with the Arabic numeral system than the Roman numeral system, it took almost 400 years for the Arabic system to be widely adopted in Italy (Smith and Karpinski 1911). The diffusion of Arabic numerals was partly impeded by the status associated with the use of Roman numerals and the vested interests of those who specialized in their use (Swetz 1987, pp. 181–82). Also, as Weber points out, there was a stigma associated with the "column system" in Europe where it was "at first viewed as a disreputable means of securing an immoral advantage in competition" (Weber 1981, p. 224). Notwithstanding their competitive environment, businessmen failed to do the most rational thing or to follow the right formula.

<sup>41</sup> Of course, in general, badly kept accounts are better than no accounts at all. But in this instance the relevant comparison is between well-kept and poorly kept double-entry accounts.

occur in the shift from an oral to a literate culture. Many have described the profound significance of this reorientation. For example, Jack Goody argues: "Culture, after all, is a series of communicative acts, and differences in the mode of communication are often as important as differences in the mode of production, for they involve developments in the storing, analysis, and creation of human knowledge, as well as the relationships between the individuals involved" (Goody 1977, p. 37). An increase in the use of accounts in economic spheres of activity brings into those spheres some of the larger consequences of literacy. For instance, writing gives discourse a more permanent, objectified form. In a written form, discourse is less tied to the immediate context of persons, place, and time (Goody 1986, pp. 53-54). It can be scrutinized in a more general, abstract, and rational fashion (Goody and Watt 1963, pp. 321, 337; Goody 1977, p. 37). In short, greater use of the written account has important cognitive and, ultimately, social consequences (Ong 1986, p. 35). The changes brought by the transition to literacy were particularly acute among businessmen, who were usually among the most literate of social groups.

Simple narrative business accounts permitted scrutiny of past actions. Energy formerly expended on remembering or reconstructing past transactions could be devoted to other concerns (Goody 1986, p. 78; Thomas 1987, p. 106). The potential for scrutiny by other persons put a greater premium on accuracy, especially if those other persons had kept their own records. Written records also served to depersonalize transactions (Goody 1977, p. 15).

In a written form, meanings appear more "fixed," relative to oral forms. The practical interpretation of written documents typically presumes that the meaning of the text is not relative to the audience. It is assumed to be static. When the text is an account, this presumption of a fixed "meaning" amounts to a belief in an objective economic reality that can be accurately represented and measured.<sup>42</sup> It also assumes that what is useful about the past for predicting the future is fixed and can be known at the present. In a written document, the author relinquishes some of the ability to modify the message to suit the audience.

The use of tabular accounts had more specific consequences. Bilateral accounts, including double entry, involved the extraction of records of transactions from a continuous narrative and their placement in a tabular arrangement. The arrangement of items in a table involves the allocation of a distinct and unambiguous place for each item. By virtue of its particular row and column, that item has a definite spatial relationship to the

<sup>42</sup> Within accounting, this view corresponds to what Davis, Menon, and Morgan (1982) have termed the "historical record" image of accounting.



other items (Goody 1977, pp. 68, 71). Spatial relationships can then be used to represent conceptual relationships. All items in a particular row may pertain to transactions that took place on the same day, while those items in a particular column may all have to do with inventory or wages. Tables and lists encourage the systematic ordering of the items in them. The temporal ordering of a narrative can be recombined according to a conceptual order (Goody 1977, p. 81). Transactions can be classified under abstract categories like capital, wages, expenses, or income.

The extraction of items from a chronological flow inevitably involves abstraction and simplification. Extraneous detail can be identified and eliminated. Qualitative differences can be reduced to quantitative differences (Goody 1977, pp. 88, 89; 1986, p. 65). The amount of information is reduced as the items are decontextualized. What was formerly a story of "how Harold of Salisbury borrowed to buy a new cow" is now a debt for "two pounds ten shillings." In accounts, transactions are interpreted and simplified (Littleton and Zimmerman 1962, p. 21).

Uncertainty is absorbed by the accounting framework. What March and Simon say about organizational classification schemes applies directly to organizational accounts: "The world tends to be perceived by the organization members in terms of the particular concepts that are reflected in the organization's vocabulary. The particular categories and schemes of classification it employs are reified and become for members of the organization attributes of the world rather than mere conventions" (March and Simon 1958, p. 165). Decisions are made on the basis of highly edited information in which "inferences" about information—rather than direct evidence—are conveyed. This is termed "uncertainty absorption."

As a classification scheme, double-entry bookkeeping edits and frames information. The complexity of economic reality is reduced, and decision makers are presented with a simple "bottom line," one that does not reflect all possible interpretations and judgments. Since it is not confined to a single organization, the uncertainty absorption resulting from the double-entry method takes on an almost hegemonic quality.

Uncertainty absorption involves extraction and abstraction, which are fundamental to the double-entry method. Three sets of books are required: the waste-book (also known as the memorandum or memorial), the journal, and the ledger. Accounting textbooks from Pacioli's on propose these same three sets of books. Transactions were first written in the waste-book, then posted to the journal, and finally entered in the ledger. Full details of transactions in chronological order were recorded in the waste-book. The journal represented an intermediate stage where information from the waste-book was checked for accuracy. When transactions entered the ledger, they were reordered and formalized. The de-

scription of the waste-book and ledger in Mair's 1757 textbook underscores the differences between narrational and tabular records, and illustrates the processes of extraction and absorption: "The *Ledger* is the *Waste-book* taken to pieces, and put together in another order: the transactions contained in both are the same, but recorded in a different manner. The *Waste-book* narrates things in a plain, simple, natural way, according to the order of time in which they were transacted; the *Ledger* contains the very same things, but artificially disposed, so as things of the same kind are classed together, and all the particular *items* and *articles* belonging to the same subject are collected and united" (Mair 1757, pp. 2–3; italics in source).

Abstraction and the reduction of quality to quantity are particularly significant in accounting. Formerly noncomparable objects are made commensurable: apples and oranges find a common denominator in monetary price. Commensurability makes it feasible to compare and evaluate alternatives. Trade-offs can be made, satisfying a precondition of rational choice. In an account, outcomes can be reduced to a single *numéraire*, money, and their relative profitability assessed. Accounts were a cognitive device that influenced the "premises of decision-making" (March and Simon 1958, pp. 138–39, 150–51). They determined the kind of information that was available to various audiences, including those making decisions within a firm. The availability of precise measures of capital and income or the existence of a common denominator for alternatives was important in structuring decision-making premises.<sup>43</sup>

The value of double-entry accounts for rational decision making has long been recognized. Early on, merchants understood that double-entry bookkeeping not only helped to justify and legitimize their transactions, it could also improve the quality of their decisions. In 1690, this quality was summarized by Stephen Monteaige as follows:

Also excellent use might accrue by this consideration, that he, who daily sees his Accounts fairly and duely kept, knows how to steer the Fly-boat of his Expenses, to hoyses or lower his Sails of outgoing, according to Wisdom: Whereas the ungrounded young Merchant reckons at random, goes on and sees not the Labyrinth he runs himself into, but at haphazard spends prodigally, according to his vain surmize on the one side, of Profit where little or none is; on the other side, of small Expenses where they are

<sup>43</sup> Van Egmond (1976, pp. 40–41) suggests another important cognitive consequence of double-entry bookkeeping. Before double entry, business was viewed by merchants as a series of discrete ventures, with profits and losses calculated independently after each venture. Double entry made the periodization of business arbitrary, thereby facilitating a conceptual shift among merchants. Where formerly business had been understood as a series of discrete events, it came to be perceived as a continuous, abstract enterprise.

thick and threefold; and how many are there of these every where . . . that by not seeing or not willing to see and set before them the state of their Affairs, go on in a secret decaying of themselves, to the utter undoing of their poor Families! [Monteage 1690, preface]

This nautical metaphor, particularly apt for 17th-century merchants, describes the rationality that leads to better and more profitable decisions. The wise merchant has the precise knowledge of his financial position that permits him to know how and when to invest.<sup>44</sup> The ungrounded merchant, who lacks accurate accounts, invests at random.

It may seem implausible that cognition could be influenced by an accounting scheme. Yet consider that in 15th-century Italy, two of the other skills, in addition to bookkeeping, typically learned in commercial schools had important connections with artistic perception and painting technique. These skills were gauging and the rule of three. Gauging involved a set of methods for calculating the volume of irregularly shaped containers (not until the 19th century were shipping containers standardized). The volume of a container was estimated through approximation by a repertoire of forms (cylinders, cones, truncated cones, spheres, etc.). The rule of three, mentioned above, was a simple technique for calculating proportions. Given two equivalent proportions, that is,  $a/b = c/d$ , and given three of the terms,  $a$ ,  $b$ , and  $c$ , the merchant could solve for the fourth term,  $d$ , by applying the rule. Many commercial problems involved proportions (e.g., exchange rates, brokerage, division of profits). Both of the skills described above were very important to merchants.

In his discussion of 15th-century Italian painting, Michael Baxandall shows how artists exploited these two commercial techniques. Shapes were painted so as to engage the gauging skills both of the artist and the (learned) audience (Baxandall 1972, pp. 86–93). Visual proportions on the canvas made use of the viewer's sensitivity to proportion (Baxandall 1972, pp. 94–102). Artists responded to the ways in which these two skills had developed the visual perception of audiences. The cognitive style that characterized this era, the result of the special skills, experience, and education of the populace, created a distinctive "period eye" that influenced both the creation and the interpretation of art (Baxandall 1972, pp. 29–108).

In a contemporary setting, a number of studies document the cognitive aspects of accounting information. Experimental results show how auditors' perceptions are influenced by a variety of factors, including information order (Butt and Campbell 1989), prior expectations and hypotheses

<sup>44</sup> For similar claims about the usefulness of double-entry, see Dafforne (1636, p. 4); Colinson (1683, preface); Hawkins (1689, p. 1); North (1714, pp. 1, 4); Hamilton (1735, p. 1); Defoe (1987, pp. 15–16); and Paton (1922, pp. 6–7).

(Kaplan and Reckers 1989; Trotman and Sng 1989), and documentation format (Purvis 1989). Decision makers are influenced by whether accounting information is presented in a tabular or graphic form (Davis 1989; Desanctis and Jarvenpaa 1989). The cognitive dimension of accounting remains as important today as it was in Pacioli's time.

As a particular form of communication, the written tabular account provided a new framework for viewing and interpreting business transactions. These could now be cognized, summarized, and presented in a more "rational" framework (Ong 1986, pp. 37–38). Changes in the way that businessmen perceived their affairs brought about changes in the way those affairs were conducted (see, e.g., McKendrick 1970, pp. 49, 54, 56).

## CONCLUSIONS

David Eugene Smith, a preeminent historian of mathematics (1917), argues that the history of mathematics can teach us much about the history of economics and commerce. He says: "The transition from partnership in its various forms to the corporations of today may well be studied in the problems of commercial arithmetic" (Smith 1917, p. 223). We would extend this claim by suggesting not only that the history of commercial arithmetic, especially accounting, reflects changes in important social institutions but also that accounting helped engender and legitimate them. As capitalism developed, the organizational forms of business expanded and changed. Demands for legitimacy and accountability shifted as different and larger audiences appeared. What is remarkable is that one cultural object, the double-entry method, could satisfy the concerns of such disparate audiences for such a long time.

The characteristics of the double-entry system help explain why it was convincing to different audiences with different concerns. Its flexibility, which permitted it to be adapted to different situations, was partly a function of its formal, abstract character. The inherent flexibility of the system made it easier to adapt an old solution to new problems than to create an entirely new solution.

Accounting as a rhetorical device has been increasingly couched in a vocabulary of rationality. Accounts no longer need to reproduce Ciceronian rhetoric, adhere to Aristotelian models of justice, or make appeals to God, in order to establish the legitimacy of a set of transactions. Double entry has achieved its own legitimacy. As the embodiment of rationality, it can be used to legitimate decisions and transactions without reference to other systems of meaning. This change occurred in the context of the spread of literacy and numeracy, which fundamentally changed audiences' expectations and interpretations of texts in a way

that enhanced the autonomous legitimacy of accounts. Today, norms of rationality govern business decision making. They also govern the descriptions and justifications of decisions. Accounts are a way to display the rationality of decisions and thus enhance their legitimacy. They help to demonstrate that alternatives were considered, trade-offs were made, and potential outcomes compared. Business accounts, as a "rhetoric of numbers," engender legitimacy because they document the rationality of decisions in an age when that form of rationality is legitimate.

Accounts, like the more recent decision trees and cost-benefit ratios, are often more important as justifications for decisions already made than as tools to make rational decisions. Rationality has become a compelling institutionalized creation myth for decisions. The recent incorporation of rational choice explanations into sociology has emphasized economic conceptions of rationality. The danger of this is in taking too naive and literal a view of institutionalized rational procedures like double-entry bookkeeping. The semblance of decisions may be rational, but not their substance.

One consequence of pervasive rationalization and institutionalization is that symbols of rationality become legitimate even if totally decoupled from the sphere of technique. As a symbol of rationality, double-entry bookkeeping legitimized business activities, even when the actual accounts did not conform, or conformed only loosely, to the strict method. If the issue for businessmen using double-entry accounts had been rationality, then why would their practice of keeping books have been so sloppy? The technical advantages conferred by double entry would have been lost. The symbolic advantages were foremost in those cases. The haphazard diffusion of the practice of the technique only affirms the rhetorical aspects we have emphasized.

Weber's analysis of accounting and its relationship to the emergence of capitalism emphasizes its technical superiority over alternative methods, the technical advantage it confers on those who use it, and its contribution to the promotion of calculation. In his analysis, Weber failed to appreciate or acknowledge the symbolic significance of accounting, its concomitant power to legitimate new capitalist forms independent of its technical prowess, and the contribution of these factors to its diffusion.

Weber was, of course, well aware that accounts were not simply a realistic rendering of the objective economic state of a firm. For example, he describes as "fiction" the impression created by double-entry bookkeeping that "different departments within an enterprise, or individual accounts, conduct exchange operations with each other" (Weber 1978, pp. 92-93). But Weber is quick to point out there is a technical reason motivating this fiction. It permits "a check in the technically most perfect manner on the profitability of each individual step or measure" (Weber

1978, p. 93, see also p. 106). Similarly, Weber argues that a cartel agreement "immediately diminishes the stimulus to accurate calculation on the basis of capital accounting, because *calculation declines in the absence of the enforced objective need for it*" (Weber 1978, p. 106; our emphasis). Nonetheless, the conditional fictive quality Weber granted to accounts persisted *only* because it was technically advantageous. In their discussion of the significance of double-entry bookkeeping for capitalism, neither Weber, Schumpeter, nor Sombart addresses the rhetorical power of accounting. All three focus exclusively on the technical superiority of the double-entry method.

All communication, whether verbal, written, numerical, or visual, attempts to persuade and can therefore be analyzed as rhetoric. For analytic reasons, we have purposely emphasized the distinction between the symbolic and the technical properties of double-entry bookkeeping. The distinction between the symbolic and the technical is never absolute. Nonetheless, it may be useful to speculate generally on the conditions under which the symbolic rather than the technical aspects of some form of information are more important.

First, consider the properties of the symbol and the character of the audience to which it is directed. In order to have symbolic import, a symbol must be evocative; it must be *interpretable* to some audience. The symbol itself must possess some acceptability or legitimacy. In the case of accounts, this depends most directly on the numeracy of the audience. The symbolic salience of numbers was established for an audience who were not only numerate but for whom numbers conveyed a special status. As time passed, accuracy and objectivity became principal elements of the special status audiences granted to numerical evidence.

In moving from the symbol to that which is symbolized, the converse is true. We would expect the symbolic significance of an object or text to be salient in situations where the activity or property that is symbolized is deemed suspect or illegitimate by some relevant audience. It is easy to imagine circumstances in which this might occur. An activity or idea would be more likely to require legitimization when it is new or when it is being proffered by a group whose status is precarious. For example, Hirsch (1986) studied the introduction and diffusion of the hostile takeover, a business innovation first promulgated by marginal entrepreneurs. The business establishment was initially outraged, but eventually co-opted the innovation to their own advantage. The shift in linguistic frames that accompanied hostile takeovers reflected their changing legitimacy. When first introduced by business outsiders, takeovers were characterized normatively in the flamboyant language of chivalry, warfare, and Westerns: the "bad guys" were always the corporate raiders. As takeovers became routinized and were enacted by firms within the estab-

ishment, their linguistic frames shifted to the more neutral legitimated language of gamesmanship. Hirsch argues that the use of a familiar genre to talk about this new technique facilitated its legitimation and diffusion (Hirsch 1986, pp. 823–29). The marginal status of commerce and of merchants in the late medieval period meant that commercial activity was of doubtful legitimacy. Double entry played an important role in legitimating these new activities.

Another situation in which the legitimacy of an idea or activity might be questionable is when it is put to a new use or extended to a new group. For example, Griswold points out the dilemma faced by younger sons of late 16th- and early 17th-century English country-elite families. These cadets were forced to reconcile their elite social status with a constrained economic opportunity structure that forced a large number of them to seek their fortunes in trade, a livelihood traditionally unsuitable for country gentleman (Griswold 1983, pp. 673–74). For members of the elite to begin undertaking mercantile activities posed a problem of legitimacy. Griswold shows how Jacobean dramas helped resolve the legitimation crisis faced by these individuals (Griswold 1983, p. 676). The symbolic side of the double-entry method was critical in legitimating the new legal forms for commercial activity (partnerships, joint-stock companies) that emerged. The familiarity and respectability of the double-entry method, when applied to the accounts of these new corporate forms, lent them an aura of legitimacy.

We might also expect the symbolic significance of something to be more important under conditions in which one wants to convey something that is valued but vague. In cases characterized by *critical ambiguity*, an obvious or objective means of conveying important values is lacking and symbols that indirectly express these values are employed. This is consistent with Feldman and March's argument that the symbolic significance of information is especially important in contexts in which there are no reliable alternative means for assessing a decision maker's knowledge (Feldman and March 1981, p. 178). Among 18th-century merchants, credit was essential and depended in large part on the reputation of the businessman. "Character" and "standing" determined one's ability to secure credit. Character was a critical but ambiguous quality that was signaled by the quality of one's bookkeeping.

Finally, the symbolic significance of an entity is likely to be greater when there exists a pressing need to document some value to a third party. For example, the use of econometric analyses may help to legitimate the plans of an organization in the eyes of third parties like investors or state funding agencies. Nobody in the organization need use or even read these analyses, but they help to document the efficiency and rationality of the organization (Meyer and Rowan 1977, p. 350). Accounts have

had symbolic importance when they have been used to justify economic activities to third parties like stockholders and government regulators.

Cultural forms like double-entry accounts are not exclusively rhetorical. One must be sensitive to the historical and cultural context in order to determine their rhetorical and technical significance. Throughout its history, the double-entry method has played a crucial rhetorical role in legitimating an expanding capitalist economic system. It has also played a technical role: altering the conceptual categories used to interpret business and to make decisions. In the past, accounting has been underestimated by social scientists—and understood one-dimensionally—as a technique for making rational decisions. We believe that accounting is both more important and interesting than that and deserves closer attention from sociologists. In the contemporary world, it is especially important to understand the symbolic power of technique and how it structures cognitive categories.

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# Core Intervention and Periphery Revolution, 1821–1985<sup>1</sup>

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The association between periphery revolution and core intervention, 1821–1985, is examined in light of the world-system perspective. Two hypotheses are tested. First, a positive relationship between revolution and intervention can be found over the *longue durée* of the two centuries. Second, however, the relationship is conditional on changing structural processes of the world system: the Kondratieff wave and the long wave of world leadership. Both hypotheses receive support from longitudinal data. Revolution is associated with intervention, but more so when the world system undergoes restructuring during Kondratieff expansions and hegemonic decline.

Contemporary theories of global political economy recognize that developed or “core” nations frequently intervene in less developed or “periphery” nations. It is acknowledged, moreover, that these interventions have occurred throughout the past several centuries, often in response to revolutionary activity in the periphery. At this point, however, our theoretical understanding of the connection between periphery revolution and core intervention across history becomes inadequate.

Two major questions are worthy of examination. First, how strong is the relationship between revolution and intervention across time? Core powers may well eschew intervention against revolution. Some periphery nations may be perceived by the core as more vital than others. Some periphery revolutions may be seen as major threats to core interests; others, as minor annoyances. Some core regimes may choose concessions over counterrevolutionary interventions. These considerations suggest that the association between revolution and intervention over the *longue durée* may not only be weak but perhaps even nonexistent.

Second, is there a varying association across history? A weak or nonex-

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istent association across the entire time span of recent centuries does not imply a lack of temporal patterning. Global processes may cause the relationship to change over time. Systematic changes in core-core rivalry, for example, may make intervention imperative in some periods but undesirable in others. When "system time" is factored in as a specification variable, some longitudinal structuring of the association may be observable.

This study utilizes the insights of the world-system and related perspectives to formulate and test two general hypotheses. First, the more extensive the revolution across the periphery, the more extensive the intervention by the core. Second, however, the strength of the association will vary systematically across time as it is conditioned by the dynamic processes of the world system, specifically the Kondratieff wave and the world-leadership wave.

#### A WORLD-SYSTEMIC PERSPECTIVE

The logic of the world-system approach suggests that core powers will frequently intervene against periphery revolutions. Central to this perspective is the structure of core-periphery relations. Over the past five centuries, the core transformed the periphery into a set of economies dependently geared toward production for export to the global market for the sake of enhanced profit taking (Wallerstein 1976). Maintenance of domination over the periphery is a high priority for the core. Revolutionary disorder in the periphery threatens the stability of this global structure of accumulation and fosters military intervention.

The disadvantages of failing to intervene against revolution may be high. The core has a considerable interest in the stability of political structures in the periphery (Galtung 1971). Revolution chills the "favorable economic climate" for core investors and traders. Core elites in the periphery are occasionally targeted by revolutionaries. Often, insurgents and besieged regimes seek assistance abroad and thereby internationalize the struggle (Modelske 1964). Sanctuaries for revolutionaries in neighboring periphery countries may broaden the conflict, threatening core interests across entire regions (Pearson 1974). If successful, revolutionaries may close the doors of their nations to penetration and exploitation by the core (Magdoff 1970). Since revolutionaries often send their political formula abroad and have a "demonstration effect" on the nonelites of other periphery nations, core powers may intervene in an effort to limit the threat (Gurr 1970). A core nation's failure to suppress revolution can damage its international prestige, thereby demoralizing its allies in both the core and the periphery.

The expected benefits of intervention may be great. Victory appears

likely. Core military power vastly outweighs that of revolutionary forces. Intervention can win the gratitude of threatened periphery elites and deepen their dependence. It may have prophylactic and iterative effects, dampening revolutionary enthusiasm in other periphery dependencies and contributing to less resistance against future interventions (Young 1974).

In fact, some cross-sectional studies of the post-World War II era have demonstrated a moderately positive correlation between political violence and intervention (Odell 1974; Pearson 1976; van Wingen and Tillema 1980). Still, the correlation is far from strong; this indicates that many revolutions escape intervention (Blasier 1983; Eckhardt and Azar 1978; Little 1975).

The costs of counterrevolutionary intervention may be too high for core nations to bear. Intervention may alienate those sectors of core publics who sympathize with the revolutionaries' objectives, thereby threatening domestic peace in the core. Past intervention failures and subsequent public constraints, such as the "Suez reflex" (Rosenau 1974) and the "Vietnam syndrome" (Klare 1982), may dampen counterrevolutionary zeal. Intervention against tenacious revolutionaries may tie down core forces and reduce the core's capability to use gunboat diplomacy against other periphery—or competing core—nations (Young 1974). It may drag core powers into unwanted conflict with other countries, especially those sympathetic to the revolutionaries (Schwarz 1970). Core nations often avoid intervention where other powers have commitments (Tillema and van Wingen 1982).

The benefits of nonintervention may appear substantial. By practicing restraint, core nations can avoid charges of imperialism and project an image of tolerance and noninterference. They can husband resources for high-priority domestic needs. Indirect, alternative strategies may appear more cost-effective: instigation of military coups to remove inadequate officials and strengthen counterinsurgency efforts; use of troops from other, more stable periphery regimes; formation of mercenary proxy forces for invasion; and enhanced assistance to beleaguered regimes, including civic action programs to erode the revolutionaries' base of support.

Thus the revolution-intervention nexus requires further specification. Although the core-periphery structure predicts a positive association, revolution may be more strongly associated with intervention under some conditions than others. Some observers have suggested that the relationship depends on structural variation in the world system (Pearson 1976; Young 1968). The association may oscillate with destabilizations of the core-core structure. Variation in competitive expansion across the core should cause the connection between revolution and intervention to



change as well. I expect that such historical conditioning has been executed by the Kondratieff wave (*K* wave) and the long wave of world leadership (*L* wave).

Revolution should prove more strongly related to intervention during expansion phases of the half-century Kondratieff cycle of the world economy (Kondratieff 1984). These *K* expansions restructure production and productive relations through new technologies, labor skills, and organizations, all of which generate a "new production paradigm" (Drass and Kiser 1988; Perez 1985). The expansion is corewide in scope and travels via the mechanisms of trade and technology transfer across the interstate system. Protectionist barriers erode, encouraging a competitive international perspective (Chase-Dunn 1989). Rather than incorporate "external arenas" into the world-system, core nations seek even greater control over existing peripheral resources and markets (Wallerstein 1982). Periphery resources and markets are perceived as more valuable, and periphery revolution is viewed as more threatening (Imbert 1959). The growing need across the expanding competitive core for imports of materials from the periphery, and especially for the cheap, unorganized labor necessary to produce these materials, makes for special intolerance of labor militancy. Revolution may disrupt the import of materials when their supply is limited and their prices are high (because of heightened demand by expanding firms) and when they are needed most (to produce more finished goods for expanding markets) (Kowalewski 1989b). Increased production generates intense competition among core economies to establish markets for the new, highly profitable, products of the *K* expansion before monopolies gradually erode (Modelska 1981). Successful periphery revolutions may change political arrangements to such an extent that core access to materials and markets is eliminated altogether.

During these *K* expansions, growing tax bases allow core regimes to finance both counterrevolutionary guns and butter. Expeditions to the periphery are economically more acceptable to prospering core publics. The scope of the expansion, which is occurring across the entire core-core structure, means that many nations are growing simultaneously. This expansion in turn aggravates international threat perceptions (Chase-Dunn 1982; Pearson and Baumann 1983). Some evidence indicates greater international violence, especially conflict involving periphery nations, during *K* expansions (Goldstein 1988; Mansfield 1988). The need for core nations to "contain" revolutionary viruses that are encouraged by competing core nations or blocs becomes more deeply felt. It has been shown that *K* expansions are somewhat related to extroverted, aggressive, missionary moods in the United States (Elder and Holmes 1986). With fewer economic problems at home, attention shifts toward international concerns. Domestic prosperity encourages a more confident, con-

frontational approach to foreign involvements, especially revolutionary disturbances in the periphery (Roskin 1974; Zevin 1972).

During *K* stagnations, in contrast, core-core competitive expansionism subsides. Core nations withdraw from foreign commitments as protectionist nationalism displaces internationalism. Declining production lowers the relative value of periphery materials and markets, thereby lowering the threat posed by periphery revolution (Rothgeb 1986). A more pessimistic, introverted mood prevails. Preoccupation with internal problems raises political pressures to keep the troops at home (Russett 1983). Political opposition to military spending and adventurism grows as tax bases shrink. The core is more reluctant to engage in counterrevolutionary adventures and more likely to withdraw counterrevolutionary forces from the periphery as a cost-saving measure. Dissensus about foreign involvements renders difficult the rallying of the public around the counterrevolutionary flag (Holmes 1985). Lower-intensity counterrevolutionary strategies prevail.

The revolution-intervention relationship should also vary with changes in the stability of the core-core political structure during the century-long cycle of global leadership (i.e., the *L* wave). During the hegemonic phase of this wave, a single core nation holds a predominant position of power and competitive expansionism across the core is reduced. A corewide consensus on fundamental international values emerges, and crusading competition among the powers declines, thereby reducing the impulse to intervene (Drass and Kiser 1988; Modelski 1978; Young 1968). The hegemon guarantees global order by means of ideological preeminence and economic mechanisms (Bornschiefer 1985). Only one core power has the global military reach to engage in many interventions. Possessing a semi-monopoly of force, it can constrain interventions by other core powers. Nonhegemonic nations "free ride" on the order-keeping capacity of the world leader. Possessing far less power than the hegemon, they have less incentive to stir up revolutions in other core countries' spheres. The united core, through its consensual hegemon, wields authority as well as power over the periphery. Hegemonic periods are characterized by greater informality of colonial rule, which implies less military intervention against periphery revolution (Bergesen and Schoenberg 1980; Boswell 1989).

During the phases of delegitimation and deconcentration into a nonhegemonic world system and eventual global war, however, growing intra-core conflict stimulates greater interventionism (Beloff 1968). The lack of an undisputed hegemon to ensure international trade and investment contributes to core uncertainty. The free ride on the hegemon's military shoulders becomes less comfortable. Force begins to replace ideological consensus and economic strategies as modes of resolving global conflict.

Nonhegemonic but militarily ascendant core nations gear up interventionist forces to blunt periphery revolution within their spheres of influence. Declining hegemony provides opportunities for core competitors of the world leader to take advantage of periphery revolutions. Ascending core nations may support these revolutions with military assistance for their own objectives (Duner 1983). As the correlation of forces shifts away from hegemonic dominance, the periphery becomes the "ideological battleground" of core powers (Moore 1969, p. 210). Ideological challenges from revolutionary forces in the periphery are seen as especially provocative. Market coercion over the periphery is gradually replaced by more formal, bilateral, and direct control (Boswell 1989; Hopkins and Wallerstein 1982). Core nations lose faith in the hegemon's capacity to guarantee an orderly core-periphery structure. As core-core rivalry grows, interventions are launched against the periphery to maintain and extend colonial and neocolonial spheres (Chase-Dunn 1978). During the eventual global war period, interventions against revolutions become necessary for national security. Not only are core regimes more repressive against political dissidents at home during wartime, they are also more repressive against dissidents in the periphery (Linfield 1990). Resources in the periphery, necessary strategic materials for expanded core militaries, are threatened by revolution. Core regimes fear that their military enemies may be instigating revolutions or preparing for occupations of domestically troubled nations in the periphery. Core nations at war have every incentive to stir up and encourage ongoing periphery revolutions against their enemies to disrupt the latter's economic base and divert military pressure from their own territories. The targeted core powers feel that intervention against periphery revolutions is a legitimate national security enterprise.

In short, the world-system perspective yields two general hypotheses about revolution and intervention. First, the core-periphery structure suggests that revolution will generally prompt intervention over the *longue durée*. Second, however, changes in competitive expansionism across the core-core structure during the *K* wave and the *L* wave should cause the relationship to vary across time.

## THE STUDY

Previous research strategies have generally adopted a case-study approach, ignored the long period prior to World War II, and failed to examine the possible effects of historical-structural dynamics. Virtually no global, longitudinal, historically conditioned findings can be found (but see Rasler 1983; Raymond and Kegley 1987). This study deliberately employs diachronic data on revolution and intervention for the past two

centuries in order to examine the relationship over the entire time span and to assess changes in the association within the periods specified by the two historical waves.

I used the *London Times* and the *New York Times* indices, as well as other sources, to assemble data on ongoing periphery revolutions and core interventions in 34 periphery nations in Africa, Asia, and Latin America for each year between 1821 and 1985. Although the Latin nations are somewhat overrepresented (21 of 34) in terms of today's periphery, the proportion seems consistent with the historical-theoretical concern of the study. The region as a whole experienced an earlier deep penetration by the core and extensive incorporation into the international division of labor than did Asia and Africa. (Many reasons exist for this, e.g., Africa's "malaria curtain.") Since we are interested in precisely such penetration, the larger Latin proportion would seem best to tap core intervention over the *longue durée* of interest here (see also McGowan 1985).<sup>2</sup> From the data sources, dummy-variable time series for each nation were constructed to indicate whether the country experienced revolutionary activity and whether it experienced intervention in each year.

Three types of analyses are employed to examine the world-system logic. The first analysis, used for both hypotheses, represents a macro-level approach. It constructs an aggregation of the 34 nations' time series for revolution and intervention into two time series so that I may test the

<sup>2</sup> For this reason the exclusion of Indochina (not fully incorporated in the French empire until the 1890s) would not appear to affect the historical findings. Consistent with world-system theorizing, which sees little structural difference between colonialism and neocolonialism, no distinction was made between traditional periphery colonies and modern periphery nation-states. Similarly, "socialist" nations were included with nonsocialist ones because of their embeddedness in the single capitalist world economy (see Chase-Dunn 1989). One might argue that the historically more recent socialist revolutions have posed a special threat to core powers and thus changed the decisional calculus for core interventions. To my mind, however, the historical contextual evidence lends little support for this view. For instance, it would be difficult to argue that the nationalist Mexican revolution of 1911 (which experienced direct U.S. intervention) was perceived as a lesser threat than the socialist Cuban and Nicaraguan revolutions of 1959 and 1979 (which to this date have not experienced direct U.S. intervention). To examine the possibility of media bias toward any geographical region of the periphery, time-aggregated scores for each nation were computed. Since all the periphery regions have experienced frequent revolution and intervention, media distortion by the *LT* and *NYT* indexes toward possibly more vital or salient areas of the periphery might be indicated by significant differences among regions. The 34 cases were partitioned into the three regions and the mean scores on the two variables were compared with analysis-of-variance *F*-tests. No significant difference was found among the three regions with respect to revolution or intervention (for both measures,  $P > .05$ ), which suggests an absence of media bias. Indeed, although the *NYT* Index was used for the great majority of the years, the Latin region ranked only second on revolution and third on intervention scores.

association between the extent of revolution and the extent of intervention across the periphery. Analysis 1 is designed to assess the degree to which peripherywide revolution represents a general destabilizing or destructuring process as reflected in corewide intervention each year. This analysis, albeit indirect, fits the structural theorizing of the world-system perspective, which conceives of periphery and core as single subsystems. The greater the peripherywide revolution, the greater the corewide need to gear up interventionist forces to stabilize the world-systemic structure. The association between the two aggregated time series should also vary with the two systemic processes, the *K* wave and the *L* wave. Specifically, the greater the proportion of periphery nations with revolution (independent variable), the greater the proportion experiencing intervention (dependent variable). Also, the relationship between these two variables should be stronger during *K*-expansionist and *L*-nonhegemonic periods than during *K*-stagnant and *L*-hegemonic ones.

The second analysis, used for the first hypothesis, sorts time aggregations of the 34 time-series variables for the separate periphery nations into a cross-sectional data set. These data are then used to examine the extent to which nations with a history of extensive revolution also had a history of extensive intervention. It is designed to gauge the extent to which periphery nations with more revolution are perceived by the core as destabilizing of the core-periphery structure and hence more deserving of intervention. Specifically, nations that experienced more years of revolution across history (independent variable) should also have experienced more years of intervention (dependent variable).

These two analyses, while not inconsistent with world-system theorizing, are open to charges of reification and poor specification. The connection between revolution and, specifically, counterrevolutionary intervention remains loose. A more direct approach would isolate individual revolutions and the interventions directed against them in particular.

Thus the third analysis, used for the second hypothesis, extracts individual revolutions and interventions against those revolutions from the time-series data to generate a single time series. This series, the percentage of periphery revolutions that experienced core intervention each year, is expected to vary with the two historical waves. Specifically, the proportion of periphery revolutions that experienced core intervention (dependent variable) should be greater during *K*-expansionist and *L*-nonhegemonic periods than during *K*-stagnant and *L*-hegemonic ones (independent variables).

For the first analysis, the 34 binary time series for revolution were added to form a single nation-aggregated series. This series was divided by the number of nations examined each year to form a series representing the percentage of periphery nations experiencing revolution in any

year. The measure characterizes the extent to which the entire periphery as a world subsystem experienced revolution across time. The series was then lagged two years to allow time for interventions to follow possible clusterings of revolution toward the ends of years and for core states to mobilize for military intervention. A similar procedure was followed for constructing an intervention series. An *ongoing* measure for intervention was purposely selected to correspond to the ongoing nature of the revolution variable. The validity of the measure is suggested by its positive association (Pearsonian  $r = +.36$ ,  $P < .001$ ) with another indicator of intervention (the absolute number of all ongoing core interventions across the periphery) constructed for the purpose. The relationship between the revolution series and the intervention series is examined (1) for the entire time span in the aggregate and (2) within each specific phase of the two world-system waves as well as within the collapsed phases of these waves (i.e., all *K* expansions vs. all *K* stagnations and all *L*-nonhegemonic periods vs. all *L*-hegemonic periods; see the Appendix).

For the second analysis, the 34 time-series variables for revolution as well as those for intervention were aggregated across time for each separate nation to yield nation scores for the percentage of years each experienced revolution and for the percentage of years each experienced intervention. The relationship between these two variables is then examined cross-sectionally using the 34 nations as cases.

For the third analysis, each nation was examined each year to determine those cases with revolutionary activity. These revolutions were then examined to isolate those that experienced intervention. A peripherywide "counterrevolutionary intervention" percentage score for each year was then constructed by dividing the number of counterrevolutionary interventions by the number of revolutions. Thus, the dependent-variable time series reflects the degree to which, each year, specific revolutions across the periphery experienced counterrevolutionary interventions from the core. The association between this series and the two waves is then examined.

The following measures were employed for the two waves. With respect to the *K* wave, economic production series are generally considered less volatile across time than price series; the former are also more likely to reflect the basic restructurings of the global economy, my theoretical concern here (Boswell 1989; Drass and Kiser 1988). Hence, van Duijn's (1983) *K*-wave periodization for fluctuations in global production, which has been found useful in other studies, was utilized (Weber 1981; Kowalewski 1989b, 1991). For the *L* wave, Modelski's (1981) periods were employed as more politically relevant to my theoretical considerations and less subject to possibly contradictory predictions than other period-

izations (Raymond and Kegley 1987; Kowalewski 1989a, 1991).<sup>3</sup> For the first analysis, nominal-level categories for periods of the *L* wave were utilized. For the third analysis, where the *L* wave is used as an independent variable, Modelski and Thompson's (1988) interval-level time series for the hegemon's share of global naval power was employed.

Three potentially confounding influences on intervention were incorporated as control variables. For the first analysis, the intervention measure, lagged one year, was included to control for the inertial effect of the ongoing intervention indicator. Ongoing interventions in one year can easily affect levels of intervention the subsequent year regardless of the level of revolution. The inclusion of a lagged dependent-variable series also reduces the problem of trending and autocorrelation and permits the use of OLS estimation, provided that tests for serial tracking are insignificant (Bradshaw 1988). The lagged measure generates a change score indicating the annual alteration in the dependent variable produced by various independent variables. Because of the high association usually found between the lagged and nonlagged measures, the method also yields a very conservative test for the effect of independent variables on the dependent one (Boswell 1989; Drass and Kiser 1988; London 1988).<sup>4</sup>

Intervention levels may also be raised by ongoing wars between core powers. When warring or preparing to enter wars as allies, core nations are geared up militarily; this facilitates the logistics of intervention and reduces the possibility of domestic dissent. During a war, a core power has an enhanced security need to draw periphery nations more closely into its sphere. The establishment and safety of military bases and sea lanes in the periphery and the need for strategic raw materials from the periphery become more salient in wartime (Modelski 1978). For the first and third analyses, a dummy control-variable series was constructed that indicates whether an ongoing core-core war was occurring in the world system (this was derived from the data sources for the intervention measure listed in the Appendix).

<sup>3</sup> Kondratieff's original work (1984) failed to give exact turning points for phases. Thus, van Duijn's (1983) periodization from empirical findings on economic growth waves across the core, which deviates only somewhat from those of other researchers (Martin 1985), was employed. Since Modelski (private communication) prefers the term "long cycle of world leadership" to "hegemonic wave," the term "*L* wave" is employed, although the term hegemony, more consistent with world-system theory, is used throughout the text to describe the wave.

<sup>4</sup> The combination of the revolution and the intervention series into a single measure for the third analysis militated against any workable incorporation of lagged relationships.

Intervention may also be influenced by the level of colonization of the periphery. A growth in the number of new colonial governors can raise intervention levels. Core forces may be deployed to remove old elites, preclude periphery resistance to colonization, build necessary political infrastructure, and provide military protection for the new metropolitan political agents, perhaps establishing a semipermanent occupation closely integrated with the colonial regime. For the first and third analyses, a series indicating the net number of colonial governors (establishments minus terminations) for each year was constructed from Henige's (1970) data. Correlations among the control and independent variables indicated no serious problem with multicollinearity.

For the first analysis, partial  $\beta$  weights were examined to indicate the direction and relative strength of the relationship between lagged revolution and intervention over the *longue durée*, and within each phase of each of the two waves as well as their collapsed phases, from the regression formula

$$I_t = a_t + B_1R_{t-2} + B_2I_{t-1} + B_3W_t + B_4G_t + e_t, \quad (1)$$

where  $I_t$  is intervention,  $R_{t-2}$  is revolutionary activity lagged two years,  $I_{t-1}$  is intervention lagged one year,  $W_t$  is war,  $G_t$  is governorships, and  $e_t$  is the error term.

Considerable controversy has surrounded the question of the degree of synchronicity between the two waves (Chase-Dunn 1989; Goldstein 1988; Thompson 1984). Hence, it was advisable to determine if each has structured the revolution-intervention relationship independent of the other. Thus, a dummy-variable series for one wave was added to the equation for the relationship within the collapsed phases of the other wave (Bowerman and O'Connell 1979). Thus, for the expansion years and for the stagnation years of the  $K$  wave,

$$I_t = a_t + B_1R_{t-2} + B_2I_{t-1} + B_3W_t + B_4G_t + B_5L_t + e_t, \quad (2)$$

where  $L_t$  is the  $L$ -wave dummy (0 = hegemony, 1 = nonhegemony). For the hegemony years and for the nonhegemony years of the  $L$  wave, a  $K_t$  term for the  $K$ -wave dummy (0 = expansions, 1 = stagnations) was substituted for the  $L_t$  term:

$$I_t = a_t + B_1R_{t-2} + B_2I_{t-1} + B_3W_t + B_4G_t + B_5K_t + e_t. \quad (3)$$

The expectation was that the two waves have acted independently, such that a control for one would not significantly alter the pattern of  $\beta$  weights within the collapsed phases of the other.

For the second analysis, the  $\beta$  weight for the relationship between the percentage of years the individual nations experienced revolution and the



percentage of years they experienced interventions was examined, from the formula

$$I = a + B_1R + e. \quad (4)$$

For the third analysis, the partial  $\beta$  weights for the relationships between counterrevolutionary intervention and the two waves were examined, from the formula

$$RI_t = a_t + B_1K_t + B_2L_t + B_3W_t + B_4G_t + e_t, \quad (5)$$

where  $RI_t$  is the percentage of periphery revolutions subject to intervention and  $L_t$  is the index of the hegemon's share of global naval power.

One-tailed tests are used for the significance of the unstandardized regression coefficients. For the first analysis, I am interested in the direction and strength of the relationship between revolution and intervention over the entire time span. With regard to variation in the relationship across different historical periods, I am less interested in the strength or even the sign of the  $\beta$  weights than in oscillatory patterns between the phases of the two specification wave variables. The small  $N$ 's for some phases require that the  $\beta$  weights be interpreted with some caution. For the second analysis, I am interested in the significance level for the relationship between the time-aggregated proportions of each nation's years with revolution and intervention. For the third analysis, I am interested in the significance between the counterrevolutionary intervention series and the two waves.

Durbin's  $h$  statistic and the Durbin-Watson (D-W) statistic were used for the first and third analyses, respectively, to determine the extent of first-order autocorrelation. When residual outliers and influential cases (as measured by Cook's  $D$ ) were found, the equations were reestimated with those years omitted (Weisberg 1980).

Note also that the results are predicated on an incomplete set of periphery nations with somewhat sketchy reportage during the earlier decades of the time span. Less than two centuries of the world system are surveyed. Also, only 3.5 iterations of the  $K$  wave and 1.5 iterations of the  $L$  wave are considered.

## FINDINGS

With respect to the first analysis, the findings provide some support for the two hypotheses. Figure 1 shows the plots of the revolution and the intervention series. While both display a certain wavelike pattern, they are imperfectly synchronized. The estimate for the *longue durée* (see table 1) supports the first hypothesis of a positive but moderate association between revolution and intervention ( $\beta$  weight =  $+.12$ ). Years with

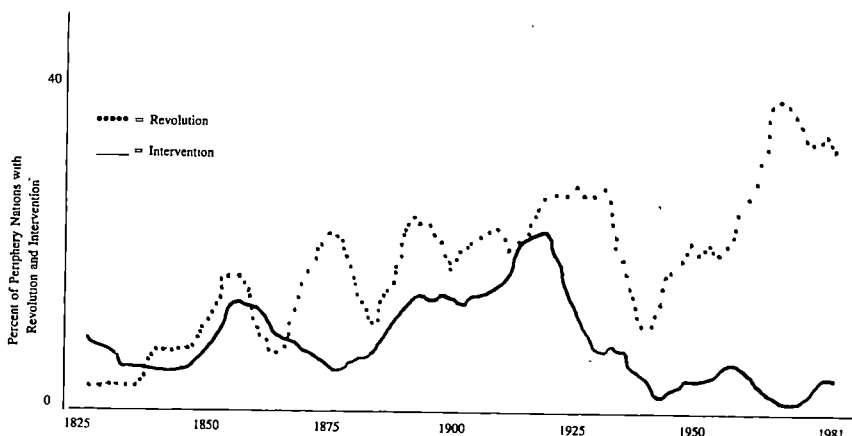


FIG. 1.—Nine-year moving-average time series of revolution and intervention

more revolution also saw more intervention, regardless of the amount of prior intervention, war, and new colonial governments in the system. At the world-systemic level, a wider scope of revolution does seem to provoke a wider scope of intervention.

The second hypothesis, that the relationship varies with competitive expansionism across the core, is also supported. With respect to the *K* wave, revolution is more positively associated with intervention during *K* expansions than *K* stagnations. Each expansion produced a more positive relationship than the previous stagnation. All relationships in expansions are positive, while two in stagnations are negative. An alternating current is also observable when examining the relationship across phases of the *L* wave. During hegemonic phases of world leadership, the relationships are negative, but they switch to positive during nonhegemonic ones. Further, each of the two specification waves appears to shape an alternating pattern of  $\beta$  weights independently of the effect of the other (see table 2). Controlling for the *L*-wave dummy yields a positive relationship in *K* expansions (partial  $\beta$  weight =  $+.23$ ) and a weakly negative one in *K* stagnations ( $-.02$ ). Controlling for the *K*-wave dummy still yields a negative relationship in *L* hegemonies ( $-.08$ ) and a positive one in *L* nonhegemonies ( $+.18$ ).

The  $\beta$  weights for the lagged-dependent control variable do not appear so large as to have distorted the estimates. Only two phases have coefficients above  $+.65$  (*K* stagnations of 1921–36 and 1967–85 with  $+.85$  and  $+.93$ , respectively), which seems primarily a function of deleted independent variables and possibly low *N*'s (Kiser and Drass 1987; see note to table 1). Whereas no oscillation of  $\beta$  weights for the lagged intervention measure is observable across the *K* wave, some pattern is detect-

TABLE 1

REGRESSIONS OF REVOLUTION WITH INTERVENTION FOR ALL YEARS AND FOR PHASES OF  
WORLD-SYSTEM CYCLES

|  | $\beta$ WEIGHTS FOR INDEPENDENT<br>AND CONTROL VARIABLES |                  |                  |                  | DURBIN'S $h$ | $N$ |
|--|--|------------------|------------------|------------------|--------------|-----|
|  | $R$  | $I$              | $W$              | $G$              |              |     |
| All years .....                        | .12*   | .62***           | .15**            | .15**            | -1.64        | 147 |
| <i>K</i> -wave phases:                 |  |                  |                  |                  |              |     |
| Stagnation (1821-36) .....             | .23  | .22              | .36              | .25              | ...          | 14  |
| Expansion (1837-65) .....              | .29 <sup>+</sup>   | .50*             | .07              | -.06             | ...          | 27  |
| Stagnation (1866-82) .....             | .10  | .35              | -.07             | -.34             | ...          | 15  |
| Expansion (1883-1920) .....            | .29*   | .29*             | .29*             | .14              | 1.33         | 36  |
| Stagnation (1921-36) .....             | -.23   | .85***           | ...              | -.23             | ...          | 14  |
| Expansion (1937-66) .....              | .38*   | .27 <sup>+</sup> | .25              | .10              | ...          | 28  |
| Stagnation (1967-85) .....             | -.24*  | .93***           | ...              | ...              | ...          | 17  |
| All stagnations .....                  | .03  | .53***           | .25*             | .30**            | -.98         | 50  |
| All expansions .....                   | .22**  | .50***           | .15*             | .19**            | .76          | 95  |
| <i>L</i> -wave phases:                 |  |                  |                  |                  |              |     |
| Hegemonic dominance<br>(1821-48) ..... | -.05   | .23              | .29 <sup>+</sup> | .03              | ...          | 26  |
| Delegitimation<br>(1849-73) .....      | .26  | .52**            | .08              | -.08             | ...          | 23  |
| Deconcentration<br>(1874-1913) .....   | .31*   | .47*             | .01              | .22 <sup>+</sup> | -.80         | 38  |
| Global war (1914-45) .....             | .21  | .65***           | .36*             | .24 <sup>+</sup> | -.92         | 30  |
| Hegemonic dominance<br>(1946-73) ..... | -.25   | .45*             | .23              | .20              | ...          | 22  |
| Delegitimation<br>(1974-85) .....      | ...  | ...              | ...              | ...              | ...          | 10  |
| All hegemonic<br>dominance .....       | -.10   | .30*             | .26*             | .16              | .18          | 50  |
| All hegemonic<br>decline .....         | .15*   | .58***           | .17*             | .17*             | -.81         | 95  |

NOTE.—Dependent variable is percentage of nations experiencing intervention. Independent variable is  $R$  = lagged revolution. Control variables are  $I$  = lagged intervention,  $W$  = war, and  $G$  = governorships. None of the computations for Durbin's  $h$  required taking the square root of a negative number, as cautioned by Ostrom (1978). The  $N$ 's reflect the lagged terms as well as the termination of the governorship series in 1969. Ellipses indicate lack of variation, termination of data series, or too few cases for analysis.

<sup>+</sup>  $P < .10$ , one-tailed test, for unstandardized regression coefficients.

\*  $P < .05$ .

\*\*  $P < .01$ .

\*\*\*  $P < .001$ .

TABLE 2  
REGRESSIONS OF REVOLUTION WITH INTERVENTION WITHIN THE AGGREGATED PHASES  
OF EACH CYCLE CONTROLLING FOR THE OTHER CYCLE

|                            | β WEIGHTS FOR INDEPENDENT<br>AND CONTROL VARIABLES |          |                  |          |          |          | Durbin's <i>h</i> | <i>N</i> |
|----------------------------|--|----------|------------------|----------|----------|----------|-------------------|----------|
|                            | <i>R</i>   | <i>I</i> | <i>W</i>         | <i>G</i> | <i>L</i> | <i>K</i> |                   |          |
| <i>K</i> -wave phases with |  |          |                  |          |          |          |                   |          |
| <i>L</i> -wave control:    |  |          |                  |          |          |          |                   |          |
| Stagnations .....          | -.02   | .51***   | .23*             | .27**    | .10      | ...      | -0.88             | 50       |
| Expansions .....           | .23**  | .43***   | .11 <sup>+</sup> | .15*     | .16*     | ...      | 1.61              | 95       |
| <i>L</i> -wave phases with |  |          |                  |          |          |          |                   |          |
| <i>K</i> -wave control:    |  |          |                  |          |          |          |                   |          |
| Hegemonic                  |  |          |                  |          |          |          |                   |          |
| dominance .....            | -.08   | .29*     | .26*             | .15      | ...      | .08      | 1.15              | 50       |
| Hegemonic                  |  |          |                  |          |          |          |                   |          |
| decline .....              | .18*   | .57***   | .13 <sup>+</sup> | .14*     | ...      | -.11     | -1.07             | 95       |

NOTE.—Dependent variable is percentage of nations experiencing intervention. Independent variable is *R* = lagged revolution. Control variables (*I*, *W*, *G*) are same as in table 1, with the addition of *L* = *L*-wave dummy; *K* = *K*-wave dummy. Ellipses indicate lack of variation, termination at data series, or too few cases for analysis.  
+ *P* < .10, one-tailed test.  
\* *P* < .05.  
\*\* *P* < .01.  
\*\*\* *P* < .001.

able across the long cycle. Lagged intervention is more weakly associated with the dependent variable during hegemonic phases (+.23 and +.45) than during nonhegemonic ones (+.52, +.47, and +.65). That is, somewhat more inertia in ongoing intervention is observable in nonhegemonic times (all hegemonic dominance years = +.30, all hegemonic decline years = +.58). This finding is consistent with my notion that, during the competitive expansionism of nonhegemony, core nations become more militarily involved in their periphery spheres, presumably resulting in longer stationings of interventionist troops.

The control variables of war and governorships, also indicators of core-core competitive expansion, show moderately positive relationships with intervention over the *longue durée*. Intervention was somewhat higher in times of war and growth of colonies. However, no temporal patterning of the relationships is observable across the various phases of the two world-system waves.

A number of outliers and influential cases were detected. The equations were reestimated with these years deleted. Only two β weights (these after eliminating influential cases) were altered to any degree, and both in the direction of greater support for the hypotheses. In the *K* stagnation of 1821–36 the association between revolution and intervention dropped

considerably (from  $+.23$  to  $+.10$ ), while in the  $L$  hegemony of 1821–48 it became more negative (from  $-.05$  to  $-.15$ ).

Durbin's  $h$  statistics revealed no problem with serial correlation. For the entire series as a whole, and for the collapsed wave phases, all  $h$ 's fell below the criterion level needed to reject the null hypothesis of zero autocorrelation at the .05 level. For uncollapsed cycle phases, reliance on  $h$  was inappropriate because of its inapplicability to small samples. For phases with 30 or more cases, however, the  $h$ 's could be calculated (Ostrom 1978). They revealed an absence of significant serial tracking.

With respect to the second analysis, used for the first hypothesis, the time-aggregated cross-sectional data for the 34 nation cases suggest an overall positive association between revolution and intervention. Some clustering of more revolutionary nations at high levels of intervention is evident. The  $\beta$  weight reaches  $+.60$  ( $P < .01$ ). Those periphery nations that experienced more years of revolution during the 165 years were more frequent targets of intervention.<sup>5</sup>

With respect to the third analysis, used for the second hypothesis, the findings support the notion of a historically varying association between revolution and intervention. Since a preliminary estimation of parameters revealed significant autocorrelation (D-W statistic = 1.202), Hibbs's (1974) pseudo generalized least squares autoregressive moving average correction was utilized to transform the variables, according to the formula

$$T_t = V_t - p(V_{t-1}), \quad (6)$$

where  $T_t$  is the transformed variable at current values,  $V_t$  is the original variable at current values,  $V_{t-1}$  is the one-year lagged values of the original variable, and  $p$  is the first-order autocorrelation coefficient. The original equation for the hypothesis—(5) given above—was then reestimated with the transformed variables. The D-W statistic showed an absence of autocorrelation.

Both waves affect the extent to which revolutions face counterrevolutionary intervention. The proportion of periphery revolutions experiencing core intervention was significantly less in  $K$ -stagnant (partial  $\beta$  weight =  $-.16$ ) and  $L$ -hegemonic ( $-.19$ ) periods. The war and colony control variables also proved moderately associated in a positive direction with counterrevolutionary intervention ( $W = .08$ ;  $G = .12$ ; D-W statistic = 2.01;  $N = 129$ ).

<sup>5</sup> The relationship remained unchanged when I controlled for the distances of the headquarters of the two media sources (London and New York; see Appendix) from the nations' capitals (partial  $\beta$  weights =  $+.60$  under the distance-from-London control and  $+.59$  under the distance-from-New York control).

The means of the percentage of revolutions subject to intervention within the collapsed phases of the two waves were also compared. The extent of counterrevolutionary intervention in all *K* expansions (mean = 28.2%) was twice the extent in *K* stagnations (14.8%). The extent during *L*-nonhegemonic phases (27.9%) was over twice the extent in *L*-hegemonic ones (13.3%). Both comparisons were highly significant (for the *K* wave,  $F = 12.9$ ,  $P < .001$ ; for the *L* wave,  $F = 12.5$ ,  $P < .001$ ).

Only one year proved to be a residual outlier. Reestimation after deleting this year only slightly attenuated the cycle coefficients (to  $-.13$  for the *K* wave and  $-.15$  for the *L* wave). Both coefficients remained significant. Cook's *D* statistics yielded no influential cases.

## DISCUSSION

The findings indicate that core intervention is significantly conditioned by revolution in the periphery. Over the *longue durée*, the more revolution, the more intervention. The core-periphery structure, destabilized by revolution, is restabilized by intervention. Revolution performs with moderate success as a predictor of core intervention in the periphery. To some degree, intervention is "periphery driven."

Yet this association requires a major qualification. The cross-temporal approach adopted here reveals the hazards of time-excluded cross-sectional analysis. Shifting structural processes can attenuate the strength of the relationships and even reverse their signs. Models, like ships, float better at some times than at others (Braudel 1980). Changes in core-core relations alter core-periphery relations. In *K*-expansionist and *L*-nonhegemonic years, the relationship between revolution and intervention is more positive. Periphery revolution stimulates more intervention during unstable times of core-core restructuring when competitive expansionism is more prevalent. To some degree, intervention is "core driven."

In such periods, core powers find themselves in a milieu of greater crisis, in the dual "danger with opportunity" sense of the Chinese ideograph. If *K* expansions present core nations with the specter of incursion into their increasingly valuable periphery spheres by other growing and competing core powers, they also open the door of opportunity for international upward mobility by means of intervention. If *L* nonhegemonies bring insecurity born of dissensus and doubts about the global hegemon's leadership, they also offer the chance for ascent to hegemonic status.

In such periods, periphery revolution—a restructuring potential from below—also presents a Janus-faced crisis. A revolutionary danger to one core power may appear as an opportunity to another. Revolutionary restructuring attempts are more likely to be met by intervention in unstable core-core times than in times of greater structural stability.

## IMPLICATIONS

As Wallerstein (1978) has emphasized, significant global phenomena depend greatly on structural continuity and change. The structural need of the core to control the periphery implies a positive relationship between revolution and intervention. The core tends to increase interventionist efforts in the periphery as revolutionary activity reaches higher levels. Intervention reproduces the core-periphery structure across history.

The correlation, however, needs further specification. Counterrevolutionary intervention appears conditional on global structural changes, increasing in times of economic prosperity and world-leadership decline. Although higher levels of periphery revolution threaten core interests, the core does not see these revolutions as equally threatening, nor the interests as equally vital, at all times. During *K* stagnations and *L* hegemonies, more revolution across the periphery is likely to precipitate a militarily moderate core reaction. In opposite periods, however, when faced with higher levels of periphery revolution, the core is more likely to regard the structure of core-periphery relations. Restabilization of periphery spheres constitutes an international insurance policy against potential losses arising from destabilized intracore relations.

The findings raise several questions about the reverse impact of counterrevolutionary interventions on core economies and world leadership. Does a growth of intervention by the core during *K* expansions contribute to resource exhaustion, and does this exhaustion in turn contribute to subsequent economic stagnation and its associated international introversion? As the declining hegemon attempts greater territorial control of the periphery through intervention, does it become militarily overextended and economically moribund, further eroding its ability to maintain global order? Does the heightened interventionism of core powers during hegemonic delegitimation destabilize core-core relationships even further, facilitating deconcentration of military power in the system and increasing the probability of war—eventually the global war, which restructures the world system with new leadership?

If we assume that the two waves will continue to shape the stream of historical events in the world system, the conjunction of a forthcoming *K* expansion and a further decline of U.S. hegemony in the 1990s should lead to a wave of corewide counterrevolutionary intervention against the periphery. Past phase lengths of *K* stagnations (see table 1) indicate that the onset of a *K* expansion is overdue. The *K*-expansion syndrome—pressure to fuel growing economies, availability of domestic resources for military involvements, and aggressive extroversion—implies a lower tolerance for revolution in the periphery. Thus, one might expect a higher priority to be placed on counterinsurgency in the near future.

Continuing decline of U.S. hegemony also foretells more counterrevolutionary intervention. Loss of consensus in the core about U.S. ability to check threats to the core-periphery structure implies greater militarization by other core powers to police the periphery. That the United States has suffered delegitimation after the Vietnam War is beyond doubt. Its pleas to NATO and Japan to shoulder a greater military burden may haringer a deconcentration of military power in the world system and may point to movement away from U.S. domination and toward the assumption of more periphery-control duty by its allies.

Yet history belies easy predictions. Factored into this navigational chart must be other, more recent streams flowing into the *longue durée* of revolution and intervention. Revolution may have spread so widely across the periphery as to make intervention more unfeasible—or at least less cost-effective—than before (Kowalewski 1991). The unprecedented rise of mass anti-interventionist movements among core publics may further hinder military incursions against periphery revolutions. The expressed fear among core decision makers that periphery conflicts could lead to undesirable major—and possibly nuclear—war among core powers may operate as an additional restraint. These new streams may form a conjuncture that will shape the course of the revolution-intervention nexus in ways heretofore unsuspected.

## APPENDIX

Revolutionary activity was operationalized as incidents of mass anti-regime violence by nonanonymous citizen groups targeted ultimately against the national-level structure of political authorities, domestic and/or imperial, aimed at overthrowing those authorities, and resulting in physical damage to persons or property of regime or citizenry. It includes reports of revolution, revolt, civil strife, insurrection, insurgency, uprising, civil war, liberation movement, clashes between revolutionary and regime forces, armed bands, armed attacks, guerrilla attacks and warfare, and seizures of territory. Included are attacks on foreign political and economic elites in the periphery who support, and are supported by, the domestic regime, when the foreign-domestic link is explicit in the political slogans or other behavior of the revolutionary attackers. Excluded are incidents of two other dimensions of political violence—conspiracy (assassinations, bombings, etc.) and turmoil (riots, demonstrations, etc.)—when identifiable links to revolutionary groups are absent. Excluded are regime-initiated acts of repression or similar ambivalent incidents; attacks on officials outside of the country; reports of plots, rumors, and conspiracies; and vague reports of unrest, trouble, or banditry. Joint military-civilian insurgencies are omitted unless the events



were led by civilians and later joined by military troops. Excluded are military coups and ethnic revolts unless dominant civilian and extra-ethnic participation with revolutionary aims is reported.

Sources included entries under "Politics and Government" or its equivalent in the *London Times (LT)* Index for 1821–50 and the *New York Times (NYT)* Index between 1851 (the first year available) and 1985. Both are global media sources located in the two major (hegemonic) core countries that have had significant interests in the periphery. The two nations have been found to be the most frequently interventionist core powers (Raymond and Kegley 1987). (This conclusion is also supported by my own count of intervention initiations from secondary sources listed below.) Since private media sources are known for their special interest in sensational violence, especially large-scale events like revolutions, the sources were deemed appropriate for such happenings. Often, however, they failed to report precise numbers of casualties for revolutions, especially in the early decades. The first report of exact numbers of casualties from revolutionary activity in the 34 countries did not occur until 1909 (for India). Thus the findings ignore the varying sizes of the events. Hence, binary variables ("1" for revolutionary activity and "0" for none) were thought most appropriate. Note, therefore, that only the persistence and scope of revolution, not its intensity, are being indicated. On the utility of the sources, see Hazelwood and West (1974), Hudson and Taylor (1972), and van Wingen and Tillema (1980). The use of single peripherywide indicators is consistent with the world-system approach and has been found useful in other studies (Kowalewski 1989a, 1989b, 1991).

The 34 nations were purposely selected on the basis of three criteria: consistent availability of data, duration and depth of involvement in the capitalist world system, and perceived importance to core powers. It was felt that a small but historically continuous set of larger important nations would yield more theoretically meaningful results for the *longue durée*. The longer the core's involvement with a periphery nation, the greater the "historical vested interest" and emotional attachment, and thus, arguably, the propensity to intervene (e.g., the United States and Panama). All the nations represented some direct economic, strategic, or other value to the core, thus presumably facilitating justification for intervention. The same cannot be said of many of today's smaller nation-states. The sample nations represent 77% of the underdeveloped world's current total population (my own calculation from World Bank data). Thus, the data appear to reflect the revolutionary and interventionist experiences of a very large share of the periphery's population. The nations include Afghanistan, Algeria, Argentina, Bolivia, Brazil, Chile, China, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador,

Egypt, El Salvador, Ethiopia, Guatemala, Haiti, Honduras, India, Iran, Jamaica, Korea (South Korea since 1948), Liberia, Mexico, Morocco, Nicaragua, Panama, Paraguay, Peru, the Philippines, Thailand, Turkey, Uruguay, and Venezuela. All nations that formerly constituted parts of larger historical entities (e.g., Gran Colombia, Central American Federation) were coded separately.

Intervention was operationalized as initiations and continuations of overt combat-related operations by the regular military units of core nations against citizen or governmental groups in periphery nations or territories, with or without the consent of the political authorities of the target nation. Such operations include seizures of territory, battles, quellings of civil disturbances, commando raids, bombings, naval bombardments, and destructive semicovert operations (minings of harbors and rivers) involving core agents as principals. The intervention was deemed ended when all core forces were withdrawn or no combat activity was reported during the year. Both unilateral and multilateral interventions were included. Excluded are minor covert operations, quiescent garrisonings of occupation troops or offshore naval patrols, maneuvers, accidental involvements unless they entailed encroachments across borders with military combat related to the controversy, military alerts, mere displays of force capability, deployments without casualties, military assistance, police-unit activities, actions by unofficially sanctioned irregular forces (e.g., filibusterers, mercenaries), small cross-border fire, harassment of shipping, naval or airforce confrontations, and entry of observer groups not using force (for related measures, see Pearson and Baumann [1974, 1977]; Tillema and van Wingen [1982]; Tillema [1986]). Core refers to industrial nations of indigenous West European heritage with interests in periphery territories or those semiperiphery nations that gradually industrialized to become major powers in the world system. They include the United States/Texas, Western Europe (from Britain east to Greece), and Japan. In line with Wallerstein (1974), Russia or the Soviet Union is here treated as a core nation competing with other powers by virtue of its embeddedness in the capitalist world economy and hence wishing to enhance its control over actual and potential peripheral territories by military intervention if necessary (e.g., Afghanistan). The intervention time series for each of the periphery nations are also in binary form. Thus for each year the periphery nation experienced an ongoing core intervention it received a "1"; for each year without intervention, a "0."

Sources for the intervention measure include the *LT* and *NYT* indexes. Some interventions lasted several years, but the two global media sources occasionally abandoned stories of combat after the initial year of intervention, so data from supplementary secondary sources were added to the media base to enhance the ongoing dimension of the measure. These

sources include references to landings by military forces, major core wars, major British campaigns, principal European armed conflicts, and U.S. combat actions in the 34 periphery nations: Singer and Small (1972), Small and Singer (1985), Butler and Sloman (1975), Cook and Paxton (1975, 1978, 1981), Cook and Stevenson (1980), Thompson (1982), Emerson (1972), U.S. Congress (1970), Williams (1980). In cases of inconsistent datings in the sources, the longer time period of intervention hostilities was selected. Long occupations to thwart chronic armed dissent (e.g., the United States in Haiti, 1915–34) were also coded in favor of the extended period in order to maximize variations in the intervention measure. Hostilities involving core forces were an almost-permanent feature of such occupations, and the length of stay indicated the core nation's commitment to control dissident events in the periphery nation. Possibly the sources were biased in their reportage toward revolution and intervention in the larger countries of the sample. Yet we should also expect extensive media reportage on smaller nations strategically important or located close to core metropolises (e.g., small Caribbean nations near the United States) and hence salient to reading publics. Indeed, some very small sample countries scored high on revolution and intervention (e.g., Nicaragua ranked fourth and third), while some larger ones scored low on both (e.g., Egypt ranked twenty-ninth and fifteenth). Still, one might expect some natural correlation between demographic and geographic size on the one hand and revolution and intervention on the other. Dissidents in larger nations should be more able to form the "critical mass" necessary to initiate large-scale revolutionary activity, while larger markets and resource bases should prompt more core intervention. Thus, media bias in favor of larger nations might push naturally positive correlations between measures for size and those for revolution and intervention into the unacceptable range. The findings might thereby be distorted. However, the Pearsonian correlations using population and square miles for the size dimension of the 34 nations reveal  $R^2$ s of only 39% and 16% for intervention and 19% and 14% for revolution. Thus, any media distortion in favor of larger nations would appear to be of minimal significance to the study.

The media may also have overreported revolution and intervention in periphery nations closer to the United Kingdom and the United States. This possibility was tested by correlating the revolution and intervention variables with the distances of the periphery countries' capitals from London and New York. Bias would be evident in strongly negative relationships. However, only one correlation is slightly negative and three are in fact positive (+.20 and +.04 for revolution and -.01 and +.23 for intervention). If anything, revolution and intervention in more *remote* periphery areas received somewhat *better* reportage.

The starting point of 1821 was selected partly because of poorer data in earlier years. Also, the clustering of successful revolutions in Latin America in the early 19th century seems atypical of the two centuries, the focus of the study (Humphrey and Lynch 1965). Further, 1821 coincides roughly with the initiation of a new *L* wave. With regard to the *K* wave, the initiation of the series later in the 19th century seemed the wisest course, given the disagreement of scholars on its applicability to preindustrial times (Kleinknecht 1989).

The construction of summative Likert-based scales is useful for generating metric measures from noninterval data and producing variables highly invulnerable to random error (McIver and Carmines 1981). The use of single scales for the periphery as a whole is consistent with world-system theory concerning the periphery as a single world subsystem as well as recent research into global cycles (van Duijn 1983).

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# Organizational Differentiation and Earnings Dispersion<sup>1</sup>

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This article analyzes earnings distribution within organizations. A formal model specifies mechanisms through which the hierarchical structure of organizations is likely to influence the extent of earnings dispersion. The predictions derived from the model are confronted with data on the pay structure and formal organizational structure of 5,600 Swedish manufacturing establishments. The empirical analyses largely confirm the predictions derived from the model: the extent of earnings dispersion within an organization is closely related to the vertical and horizontal differentiation of its formal structure. This conclusion holds true even when the sex, education, and work experiences of those populating the organizational structures are controlled for.

## I. INTRODUCTION

In this article I examine the relationship between formal structural properties of work organizations and the extent of earnings dispersion within them. Like many other observers (e.g., Pfeffer 1977; Baron and Bielby 1980; Baron 1984), I believe that systematic studies of intraorganizational processes are crucial for understanding the stratification order of contemporary society. Given the fact that individuals spend a considerable part of their careers within one organization (Hall 1982), differences in organizational pay schedules and opportunity structures are likely to exercise considerable influence on individuals' socioeconomic attainment.

The focus of this article differs in one important respect from recent

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research on organizations and stratification. It is not concerned with earnings attainment, but with earnings dispersion. I do not attempt to explain why individuals with certain characteristics receive certain amounts of earnings. The question instead is, Why are certain social systems, that is, organizations, more unequal than others in the sense of exhibiting greater dispersions of earnings?

While these two questions are interrelated, a distinction between them is useful: factors needed to explain earnings dispersion might not necessarily be the same as those needed to explain earnings attainment. For instance, although education is one of the single most important factors influencing earnings attainment, it has been argued that education is far less important when it comes to explaining earnings dispersion. Sørensen (1977, 1983), for one, argues that education and other human capital variables are important resources that influence individuals' access to positions in social structure but that the rewards attached to the positions are influenced only marginally by the human capital characteristics of their incumbents. Hence, even if a close relationship exists between individuals' education and earnings, the temporal and spatial covariation between the distribution of education and the distribution of earnings may be quite low (see also Thurow 1975).

In this article I focus on one particular factor likely to influence the extent of earnings dispersion within organizations: the vertical and horizontal differentiation of their formal structures. I suggest that a change in the formal structure of an organization is likely to change the earnings dispersion within the organization because rank and pay are often tightly coupled. To explore this relationship between organizational differentiation and earnings dispersion, a mathematical model is developed. This model serves two major purposes. First, it highlights mechanisms that are likely to generate systematic relationships between formal structural characteristics of organizations and the extent of earnings dispersion within them. Second, it allows us to deduce a series of fairly precise predictions that will be tested empirically in the latter part of the article.

The article is organized as follows. In the next section I develop the formal model and analyze probable relationships between the height and shape of organizational hierarchies and the extent of earnings dispersion. Predictions derived from the formal analysis thereafter are tested by a Swedish data set with information on the pay structure and formal organizational structure of close to 5,600 work organizations.

## II. A STYLIZED MODEL

In this model of organizational stratification many facts known to affect the earnings distribution are deliberately left out; others are only touched

on briefly. My purpose is not to produce a more or less complete list of possible influences on the earnings distribution within organizations. Instead, I focus on a few critical factors and explicate in detail how they are likely to affect the extent of earnings dispersion.

The model developed here takes into account the fact that most organizations are hierarchically shaped with gradually fewer positions at higher organizational levels (cf. Blau 1970). To simplify the formal analysis, I make a somewhat stronger assumption, however. I assume that an organization consists of  $L_j$  hierarchical levels and that the relationship between the number of positions at two consecutive organizational levels is the same throughout the hierarchy. If we let  $n_{ij}$  be the number of positions at the  $i$ th hierarchical level in the  $j$ th organization (where level 1 is the lowest organizational level), the model is built upon the assumption that the shape of the organizational hierarchy is governed by a single parameter  $S_j$ ; the smaller this parameter is, the leaner and more peak formed the hierarchy will be:

$$S_j = \frac{n_{ij}}{n_{i+1j}}. \quad (1)$$

This organizational model allows for the number of subordinates per supervisor ("span of control") to vary within hierarchical levels, but it assumes that the ratio between the total number of positions at levels  $i$  and  $i + 1$  is constant across levels. The main reason for maintaining this assumption is that it greatly simplifies the formal analysis. Since  $n_i$  equals  $S^{L-i}$  in this type of organization, the relationship between the total number of positions in the organization ( $N$ ), the shape of the hierarchy ( $S$ ), and the number of levels ( $L$ ) is equal to<sup>2</sup>

$$N = \sum_{i=1}^L S^{L-i} = \frac{S^L - 1}{S - 1}. \quad (2)$$

It is possible to build a pay structure into this organizational model by capitalizing on the fact that rank and pay are tightly coupled in most organizations. In the tradition of Simon (1957) and Lydall (1959), I approximate superiors' hourly pay by taking their immediate subordinates' pay and adding a constant percentage. The average hourly pay at the  $i$ th hierarchical level ( $w_i$ ), then, is given by

$$w_i = w_1 \beta^{i-1}, \quad (3)$$

where  $w_1$  is the average pay at the lowest hierarchical level, and  $\beta$  is the

<sup>2</sup> To simplify the notation, I will drop the subscript from here onward.

relative difference in average pay between two successive levels, that is,  $\beta = w_{i+1}/w_i$ .

How realistic is this model of the pay structure? A fair amount of empirical research suggests that rank and pay indeed are closely linked in most organizations. For example, Spillerman (1986) found that a model similar to the one used here accurately described the salary schedule of a large insurance company. In my earlier work (Hedström 1988), I found that organizational rank was by far the best predictor of the hourly pay of Swedish manufacturing employees; the rank variable by itself accounted for over 59% of the variance in individuals' hourly pay and remained highly significant even after controlling for relevant human capital characteristics. Rosenbaum (1980) reports similar results for the United States.<sup>3</sup> This is not to deny that in certain types of organizations—most obviously professional sports organizations—many individuals make more than their managers. But, as a general “stylized fact” describing the pay schedule of a typical organization, this model appears quite reasonable (see Baker, Jensen, and Murphy 1988).

Equations (1)–(3) form the core of a model that allows for analyses of how organizational differentiation is likely to influence earnings dispersion. The measure I will use to characterize the extent of earnings dispersion within an organization is the coefficient of variation. Like most other inequality measures, the coefficient of variation is zero when everyone is paid the same amount per hour, and higher scores indicate greater earnings dispersions.<sup>4</sup> Given that the coefficient of variation is equal to the standard deviation of pay divided by mean pay, we first need to examine how these two aspects of the earnings distribution are related to the height and shape of the organizational hierarchy.

The total wage bill of the organization ( $W$ ) is equal to

$$W = \sum_{i=1}^L n_i w_i = \sum_{i=1}^L \frac{n_1}{S^{i-1}} w_1 \beta^{i-1} = \sum_{i=1}^L \frac{S^{L-1}}{S^{i-1}} w_1 \beta^{i-1} = w_1 \frac{\beta^L - S^L}{\beta - S}, \quad (4)$$

and the average hourly pay within the organization ( $\bar{W}$ ) is obtained by simply multiplying equation (4) with the inverse of equation (2), that is,

$$\bar{W} = \frac{1}{N} \sum_{i=1}^L n_i w_i = \left( \frac{S-1}{S^L-1} \right) \left( \frac{\beta^L - S^L}{\beta - S} \right) w_1. \quad (5)$$

<sup>3</sup> See also Malkiel and Malkiel (1973), Wright (1979), and Rao and Datta (1985).

<sup>4</sup> See Allison (1978) and Schwartz and Winship (1980) for detailed discussions of the coefficient of variation and its relation to other inequality measures.

The standard deviation of pay within an organization (SD) is given by

$$SD = \sqrt{\frac{\sum_{i=1}^L n_i w_i^2 - N\bar{W}^2}{N}}, \quad (6)$$

which can be shown to equal

$$SD = w_1 \sqrt{\left(\frac{\beta^{2L} - S^L}{\beta^2 - S}\right)\left(\frac{S - 1}{S^L - 1}\right) - \left(\frac{\beta^L - S^L}{\beta - S}\right)^2 \left(\frac{S - 1}{S^L - 1}\right)^2}. \quad (7)$$

The coefficient of variation (CoV) now can be obtained by multiplying equation (7) with the inverse of equation (5). Rearranging the terms and simplifying the expression, we get:

$$CoV = \frac{\beta - S}{\beta^L - S^L} \sqrt{\left(\frac{\beta^{2L} - S^L}{\beta^2 - S}\right)\left(\frac{S^L - 1}{S - 1}\right) - \left(\frac{\beta^L - S^L}{\beta - S}\right)^2}. \quad (8)$$

This equation shows how the extent of earnings dispersion is likely to be related to the shape ( $S$ ) and height ( $L$ ) of an organization's hierarchy. The complexity of the equation makes it somewhat difficult to see how a given change in  $S$  or  $L$  is likely to affect the earnings dispersion within the organization, however. Therefore I have plotted the function in figure 1.<sup>5</sup>

The plot shows that the extent of earnings dispersion within an organization is positively related to the number of hierarchical levels ( $L$ ) and negatively related to the size of the average span of control ( $S$ ). The plot also reveals that the marginal effect of adding another hierarchical level is likely to be smaller the more levels there are in the organization to start with. Therefore, in the empirical analyses to follow, we should expect to find a positive descending nonlinear relationship between the number of hierarchical levels ( $L$ ) and the extent of earnings dispersion within an organization (CoV). The plot also suggests that the marginal effect of a given change in the average span of control ( $S$ ) is smaller the "leaner" the hierarchy is to start with. Therefore, we should expect a negative ascending relationship between the average span of control and the extent of earnings dispersion within an organization (CoV). Finally, figure 1 makes evident that the negative effect of a given change in the span of control is more pronounced in organizations with many hierarchical levels and that the positive effect of a given change in the number of hierarchical levels is greater in organizations with "lean" structures. Therefore, a negative interaction between  $S$  and  $L$  is to be expected.

<sup>5</sup> The plot in fig. 1 assumes an average pay differential between successive job levels of 20%, i.e.,  $\beta = 1.2$ .

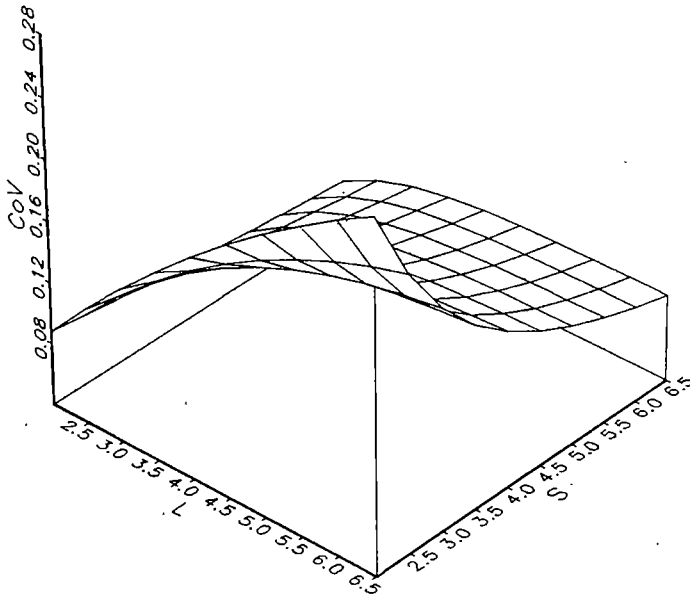


FIG. 1.—Predicted relationships between earnings dispersion (CoV) and shape (S) and height (L) of organizational hierarchies.

The upshot of this condensed analysis is that pay schedules in which rank and pay are tightly coupled are likely to severely constrain the range of earnings distributions we observe within organizations. Furthermore, rank-based pay schedules are likely to make the earnings distribution closely related to the formal structures of the organizations. Indeed, knowing the height and shape of an organization's hierarchy should allow us to predict quite precisely the extent of earnings dispersion within it.

### III. DATA

To test the predictions derived above, I employ a comparative organizational approach that relates variations in the extent of earnings dispersion to variations in organizational structure. An alternative approach would have been to estimate individual-level models incorporating the posited relationships between spans of control, job levels, and individual pay. But since we are interested in the relationship between earnings dispersion and organizational structure—two organizational-level variables—the rule of parsimony provides a compelling argument for a comparative organizational approach. An organizational-level analysis will allow us to

test the predictions derived above with a considerably more parsimonious model than would be possible with individual-level data.

The data used here were collected in 1976 by the Swedish Employers' Confederation (SAF) and the Swedish Central Bureau of Statistics (SCB) and contain information from the personnel files of nearly every manufacturing establishment in Sweden.<sup>6</sup> Because of some technical problems when the data were collected in 1976, establishments in basic metal industry had to be excluded from the analysis. For the purposes of these analyses, establishments with less than 10 full-time equivalent positions and a small number of establishments that failed to report data on their white-collar employees were also excluded. The data file used in these analyses contains information on 700,000 individuals working in 5,592 different manufacturing establishments. Within each organization, data were aggregated and various indices were constructed characterizing the earnings distribution within the organizations as well as their formal structural properties.

To compensate for the fact that some organizations use more part-time labor than others, each individual record received, before aggregation, a weight based on the number of hours the individual was working.<sup>7</sup> These weights make the basic units of analysis full-time equivalent positions rather than individuals. For example, by using these weights the organizational-size variable refers to the number of full-time equivalent positions within the organization and not to the number of individuals employed by the organization.

Two theoretically important variables—shape of hierarchy and number of hierarchical levels—had to be estimated indirectly. In the organizational model explored above, the shape of the hierarchy ( $S$ ) can be inferred if we know the total number of positions at the lowest hierarchical level ( $n_1$ ):

$$S = \frac{N - 1}{N - n_1}. \quad (9)$$

The SAF-SCB survey includes information about both  $N$  and  $n_1$ . Hence, I was able to estimate the shape of the hierarchy by solving the above equation for each organization. With this estimate of the  $S$  coefficient, I could then approximate the number of hierarchical levels ( $L$ ) by solving the equation

<sup>6</sup> See SCB (1977) for a detailed description of the survey.

<sup>7</sup> Before aggregation, individuals working half-time received a weight of .5. Individuals working two-thirds of full-time received a weight of .67, and so on. "Full-time" was defined as a 40-hour workweek.

$$L = \frac{\ln(NS - N + 1)}{\ln(S)} \quad (10)$$

for each organization.

In order to test the validity of this way of estimating the number of hierarchical levels within an organization, I compared my estimates with the number of levels actually observed in Lincoln and Kalleberg's (1985) study of 52 U.S. manufacturing establishments. The Swedish data used in this study were matched with the Lincoln-Kalleberg data set to achieve an identical distribution over 25 industry-size groups. The average number of levels found in the Lincoln-Kalleberg data was 5.04, and the average in the matched Swedish sample was 5.28. A standard significance test suggests that this difference between the two samples is not statistically significant, thus offering some evidence for the appropriateness of this estimation technique.

#### IV. RESULTS

The empirical analyses seek to answer three questions: (1) To what extent is the degree of earnings dispersion within an organization related to the shape of its formal structure? (2) Are the observed relationships between organizational differentiation and earnings dispersion compatible with the predictions of the theoretical model? (3) Does the relationship between differentiation and dispersion persist even when the sex, education, and labor-force experiences of those working within the organizations are controlled for?

First of all it should be noted that the extent of earnings dispersion varies considerably among the organizations included in this study. If we compare the 10% of the organizations with the most "unequal" earnings distributions to the 10% with the most "equal" distributions, we find that the average coefficient of variation is 4.2 times higher in the former group.<sup>8</sup> The model developed above suggests that these differences are to a large extent due to differences in the structural properties of these organizations. More specifically the analysis suggests that the extent of earnings dispersion within an organization (CoV<sub>j</sub>) can be predicted by

<sup>8</sup> It might also be of interest to note that a regular ANOVA, decomposing the total variation in hourly earnings into its within- and between-organization components, revealed that approximately 80% of the total earnings variation is attributable to the within-organization component. Consequently an organizational analysis has the potential to explain a substantial proportion of earnings dispersion in society at large. Most likely, the between-organization component is larger in many other countries with a more segmented labor market than in Sweden.

knowing the height ( $L_j$ ) and shape ( $S_j$ ) of its hierarchy. A linear model like the following,

$$\text{CoV}_j = b_0 + b_1L_j + b_2L_j^2 + b_3S_j + b_4S_j^2 + b_5L_jS_j + e_j, \quad (11)$$

is a convenient approximation of the theoretical model in equation (8) that should explain a substantial proportion of the variance in the intra-organizational earnings distribution.

Given the results of the formal analysis, we can formulate several hypotheses about the parameters of equation (11).

*Hypothesis 1.* A *positive* authority-level term ( $b_1$ ) is expected since organizations with many hierarchical levels are likely to have more dispersed earnings distributions than organizations with few hierarchical levels.

*Hypothesis 2.* A *negative* squared authority-level term ( $b_2$ ) is expected since a descending curvilinear relationship is likely to exist between the number of hierarchical levels and the extent of earnings dispersion.

*Hypothesis 3.* A *negative* shape-of-hierarchy term ( $b_3$ ) is expected since the model predicts less earnings dispersion in organizations with flat hierarchies.

*Hypothesis 4.* A *positive* squared shape-of-hierarchy term ( $b_4$ ) is expected since an ascending curvilinear relationship is likely to exist between the average span of control ( $S$ ) and the extent of earnings dispersion ( $\text{CoV}$ ).

*Hypothesis 5.* A *negative* interaction term ( $b_5$ ) is expected since the model indicates that the effects of  $S$  and  $L$  are negatively conditioned by each other.

To test these hypotheses, I regressed the extent of earnings dispersion within organizations on the aforementioned variables that measure the height and shape of formal hierarchies (see table 1).

The first regression model in table 1 includes the linear main effects of  $L$  and  $S$ . As expected, earnings are more widely dispersed in organizations with tall and lean hierarchies. This linear model explains approximately 30% of the variance in the intraorganizational earnings distribution.

Allowing for curvilinear relationships considerably improves the fit of the model (see col. 2). The  $R^2$  increases to 38% when the squared terms are entered into the equation. The squared authority-level term is negative, which supports the hypothesized positive descending relationship between the number of hierarchical levels and the extent of earnings dispersion. As expected, the squared shape-of-hierarchy term is positive, hence offering support for the predicted negative ascending relationship between the average span of control and the extent of earnings dispersion. In the third model the interaction term also is introduced. As the formal



model suggested, the interaction term is negative, but it is not statistically significant.

In the fourth regression model a control variable ( $\beta$ ) measuring the relative pay differential between hierarchical levels is introduced.<sup>9</sup> As expected, the effect of this variable is positive and the fit of the model improves considerably; the regression model now explains approximately 46% of the variance. More important, the effects of the other variables are not noticeably influenced by the introduction of this control variable.

These analyses hence give considerable empirical support for the predictions derived from the formal model. It is somewhat unclear, however, how much faith one should have in these parameter estimates, given the high correlation between some of the independent variables (see table 2 above). To examine the robustness of the results I reestimated the model. Instead of using polynomials to model the nonlinear relationships, I transformed the data to linearize the relationships and then fitted a linear model to the transformed data. A combination of power transformations of the independent variables and a Box-Cox transformation of the dependent variable,

$$\frac{\text{CoV}_j^\lambda - 1}{\lambda} = b_0 + \frac{b_1}{\sqrt{L_j}} + b_2 \sqrt{S_j} + b_3 \beta_j + e_j, \quad (12)$$

substantially reduced the multicollinearity problem and resulted in an adequate model with "well-behaved" residuals (the maximum-likelihood estimate of  $\lambda$  equaled .55).

As can be seen in the fifth column of table 1, the fit of this linearized model is more or less identical with the fit of the polynomial model. In fact, the predicted values of the two models are virtually identical; the zero-order correlation between the fitted values is .98. Given the fact that the linearized model and the polynomial are virtually isomorphic, our confidence in the parameter estimates of the polynomial model is strengthened. If the high multicollinearity had substantially degraded the parameter estimates of the polynomial model, we would have expected greater differences between these models.

So far in this article, I have not controlled for compositional differences between the organizations. Individual-level controls are important since the characteristics of the individuals working within the organizations might influence the extent of earnings dispersion. The present data set allows us to control for the sex, education, and labor-force experiences of those populating the organizational structures. These variables are far

<sup>9</sup> The pay differential in the  $j$ th organization ( $\beta_j$ ) is measured as the ratio of the average hourly pay among first-line supervisors ( $W_{Sj}$ ) to the average hourly pay among workers ( $W_{Wj}$ ), i.e.,  $\beta = W_{Sj}/W_{Wj}$ .

TABLE 1  
OLS REGRESSION OF INTRAORGANIZATIONAL EARNINGS DISPERSIONS ON ORGANIZATIONAL AND DEMOGRAPHIC VARIABLES

| VARIABLES          | OLS REGRESSIONS  |                  |                   |                  |                |                  |
|--------------------|------------------|------------------|-------------------|------------------|----------------|------------------|
|                    | 1                | 2                | 3                 | 4                | 5              | 6                |
| $L$ .....          | .020<br>(36.6)   | .048<br>(33.0)   | .048<br>(27.4)    | .049<br>(30.1)   | ...            | .043<br>(25.5)   |
| $S$ .....          | -.002<br>(-16.1) | -.002<br>(-10.0) | -.002<br>(-3.6)   | -.003<br>(-4.3)  | ...            | -.002<br>(-2.7)  |
| $L^2$ .....        | ...              | -.002<br>(-22.5) | -.002<br>(-20.8)  | -.002<br>(-23.7) | ...            | -.002<br>(-20.4) |
| $S^2$ .....        | ...              | .00002<br>(7.3)  | .00002<br>(6.9)   | .00003<br>(9.2)  | ...            | .00002<br>(8.1)  |
| $L \times S$ ..... | ...              | ...              | -.00003<br>(-.10) | -.0002<br>(-.67) | ...            | -.0005<br>(-2.1) |
| $\beta$ .....      | ...              | ...              | ...               | .109<br>(28.9)   | .105<br>(29.2) | .101<br>(27.0)   |

|                        |                |                |                |                 |                  |      |
|------------------------|----------------|----------------|----------------|-----------------|------------------|------|
| $1/\sqrt{L}$ .....     | ...            | ...            | ...            | ...             | -.476<br>(-40.4) | ...  |
| $\sqrt{S}$ .....       | ...            | ...            | ...            | ...             | -.007<br>(-6.6)  | ...  |
| $CoV_{ED}$ .....       | ...            | ...            | ...            | ...             | .098<br>(10.7)   | ...  |
| $CoV_{EX}$ .....       | ...            | ...            | ...            | ...             | .055<br>(7.5)    | ...  |
| SEX .....              | ...            | ...            | ...            | ...             | .158<br>(8.3)    | ...  |
| SEX <sup>2</sup> ..... | ...            | ...            | ...            | ...             | -.149<br>(-10.1) | ...  |
| Intercept .....        | .155<br>(60.2) | .089<br>(17.8) | .089<br>(17.1) | -.040<br>(-6.1) | -.338<br>(-50.5) | ...  |
| $R^2$ .....            | .296           | .375           | .375           | .457            | .464             | .489 |

NOTE.— $N = 5,592$ ;  $t$ -values in parentheses. See text for definition of variables.

TABLE 2  
CORRELATIONS, MEANS, AND STANDARD DEVIATIONS

| Variables                   | 1    | 2    | 3    | 4     | 5      | 6     | 7    | 8    | 9    | 10  | 11   | 12  | 13  |
|-----------------------------|------|------|------|-------|--------|-------|------|------|------|-----|------|-----|-----|
| 1. CoV .....                | ...  |      |      |       |        |       |      |      |      |     |      |     |     |
| 2. $L$ .....                | .51  |      |      |       |        |       |      |      |      |     |      |     |     |
| 3. $S$ .....                | -.36 | -.37 |      |       |        |       |      |      |      |     |      |     |     |
| 4. $L^2$ .....              | .34  | .92  | -.21 |       |        |       |      |      |      |     |      |     |     |
| 5. $S^2$ .....              | -.14 | -.14 | .83  | -.07  |        |       |      |      |      |     |      |     |     |
| 6. $L \times S$ .....       | -.26 | -.21 | .96  | -.09  | .80    |       |      |      |      |     |      |     |     |
| 7. $1/\sqrt{L}$ .....       | .61  | .92  | -.52 | .71   | -.22   | -.33  |      |      |      |     |      |     |     |
| 8. $\sqrt{S}$ .....         | -.53 | -.64 | .82  | -.43  | .44    | .78   | -.77 |      |      |     |      |     |     |
| 9. $\beta$ .....            | .24  | -.00 | .08  | .03   | .02    | .08   | -.04 | .09  |      |     |      |     |     |
| 10. CoV <sub>ED</sub> ..... | .37  | .40  | -.43 | .29   | -.19   | -.43  | -.58 | -.53 | -.10 |     |      |     |     |
| 11. CoV <sub>EX</sub> ..... | -.03 | -.08 | .14  | -.04  | .08    | .12   | .14  | .08  | .02  | .05 |      |     |     |
| 12. SEX .....               | -.11 | -.01 | -.09 | -.01  | -.06   | -.12  | .00  | -.09 | -.20 | .07 | -.03 |     |     |
| 13. SEX <sup>2</sup> .....  | -.16 | -.05 | -.05 | -.04  | -.04   | -.09  | .06  | -.04 | -.20 | .08 | -.03 | .98 | ... |
| Mean .....                  | .21  | 3.34 | 8.01 | 14.44 | 125.46 | 21.55 | 1.13 | 1.82 | 1.20 | .19 | .55  | .78 | .66 |
| SD .....                    | .08  | 1.80 | 7.84 | 29.68 | 568.03 | 14.10 | .36  | .69  | .22  | .07 | .10  | .21 | .28 |

from perfect, however. Most important, the data set only includes the educational levels of white-collar employees. The educational levels of blue-collar employees therefore had to be imputed. The imputation strategy adopted here is very simple. In the mid-1970s, about 75% of all blue-collar workers in Swedish manufacturing industries only had the compulsory seven to nine years of schooling. As a conservative strategy, all blue-collar workers therefore were assigned seven years of schooling.<sup>10</sup> Labor-force experience, then, was calculated as time since completion of schooling, that is, as age minus years of schooling minus seven.

I control for compositional differences by entering variables measuring the dispersion of these demographic variables into the above regression models. The distributions of education and experience within an organization are measured with the coefficient of variation, and the gender composition is measured with the proportion of male employees within the organization.<sup>11</sup>

As the results in the sixth column of table 1 reveal, earnings are more widely dispersed in organizations where the personnel has a more varied background in terms of formal schooling and years of labor-force experience; the effects of  $CoV_{ED}$  and  $CoV_{EX}$  both are positive. The gender composition of an organization is also associated with the extent of earnings dispersion; earnings appear to be most widely dispersed in organizations with approximately equal proportions of men and women.<sup>12</sup> The fit of the model also improves somewhat when these demographic variables are included;  $R^2$  increases from .457 to .489.

Even more important than the specific effects of these demographic variables is the fact that the effects of the structural variables do not change much when these controls are introduced. The only noteworthy

<sup>10</sup> Since earnings tend to be lower and less differentiated among blue-collar employees than among white-collar employees, assigning them a low and undifferentiated education is likely to increase the observed correlation between the distributions of education and earnings. Thus the imputation strategy is likely to favor the null hypothesis.

<sup>11</sup> In a preliminary analysis not reported here, I also used an alternative method for controlling for compositional differences between the organizations. Separate individual-level earnings equations were estimated within each organization where the log of hourly pay was regressed on education, log labor-force experience, and sex. The *residual* variance from these within-organization equations was then used as an alternative measure of earnings dispersion from which compositional differences between the organizations had been partialled out. This method produced similar results to those reported here, and these were deemed less reliable because of the low signal-to-noise ratio inherent in variables based on residual variances.

<sup>12</sup> The partial effect of the proportion of men is equal to  $CoV_j = .158SEX_j - .149SEX_j^2$ , according to the estimates in table 1. Differentiating this equation and setting the result equal to zero, one finds that the maximum dispersion of earnings is likely to be found in organizations with 53% male employees, i.e., in organizations with approximately equal proportions of men and women.

effect of including these variables is that the interaction effect between the height and the shape of the organizational hierarchy now is negative as predicted by the formal model. Hence, these findings give further weight to the results reported above and emphasize the close relationship that exists between structural features of organizations and the intraorganizational earnings distribution.<sup>13</sup>

## V. DISCUSSION

Systematic analyses of earnings dispersion enhance our understanding of the attainment process because individuals' economic returns to their human capital "investments" always tend to be influenced by the extent of earnings dispersion, that is, the larger the variance of earnings is within a social system, the greater the individual returns to given investments are likely to be. To the extent that the earnings distribution is not endogenously given by the distribution of education and other individual-level characteristics, clarity and additional insight into the attainment process can be gained by separately analyzing the determinants of each distribution.

Dispersion analyses are also important because the extent of inequality in a social system is likely to be related to a host of other factors of concern to sociologists and other social scientists. Blau (1977) presents a general case for why the extent of inequality in a social system is likely to influence its performance and behavior. Along the same lines many economists argue that a trade-off exists between equality and efficiency; smaller pay differentials are believed to weaken work incentives, which in turn will impair economic efficiency (see Okun 1975).

In this article I have analyzed the relationship between organizational differentiation and earnings dispersion. A formal model was developed, and its predictions were tested through data on the earnings distribution within 5,600 Swedish manufacturing establishments. The empirical analyses suggest that the model has considerable predictive power; it is possible to predict quite accurately how earnings are distributed within organizations by simply knowing a few essential features of their formal structures.

In analyzing the extent of earnings dispersion within work organizations, I have adopted a positional view of the labor market. I assume that rewards are attached to job positions on the basis of job rank in the formal authority chain and not to individuals on the basis of their produc-

<sup>13</sup> Standardized regression coefficients (not reported here) ranked the relative importance of the independent variables as follows. Most important was the *L* variable followed by  $\beta$ , *S*,  $\text{CoV}_{\text{ED}}$ ,  $\text{CoV}_{\text{EX}}$ , and *SEX*.

tive assets, as is assumed in most neoclassical accounts. This positional approach does not imply that the characteristics of individuals are unimportant for stratification outcomes, only that their importance is largely limited to sorting individuals into differentially rewarded slots in the social structure.

An important implication of the structural approach adopted here is that the earnings distribution within a society is likely to reflect the organizational demography of the society. More precisely, the shape of the earnings distribution and the extent of earnings inequality is likely to be related to how the population of jobs is distributed across organizational ranks, and shifts in the size distribution of ranks are likely to produce shifts in the size distribution of earnings. Rank distributions and their determinants therefore appear to be important areas of future stratification research.

Most empirical evidence seems to suggest that the number of higher-rank jobs have grown much faster than the number of lower-rank jobs, a circumstance that has altered the size distribution of ranks. Blau (1968), for instance, maintains that there has been a historical transformation of the organization of work that has resulted in a "modern" organizational form characterized by a tall and slim hierarchy. To explain these kinds of shifts in the distribution of ranks, it is crucial to examine closely the rates at which jobs at different ranks are created and abolished.

Two distinct approaches to explaining such changes have emerged in recent literature: the organizational ecology approach (see Hannan and Freeman 1989) and the comparative organizational approach of Blau, Pfeffer, and others. Organizational ecologists assume strong inertial forces and explain organizational change with reference to a renewal process in which new organizations with different structural makeups are replacing old ones. The comparative organizational approach assumes a more flexible structure and explains organizational change in terms of structural changes within the existing population of organizations. Although selection processes at the level of populations are important for explaining organizational change, I believe that careful empirical research will reveal that a substantial part of observed changes at the population level must be attributed to changes within existing organizations. Thus detailed comparative analysis is crucial.

The specific types of models developed in this article allow for close links between comparative organizational analysis and current stratification concerns. For instance, an important empirical finding of the comparative organizational tradition is that formal organizational structures are closely related to the technologies and complexities of the production process (see Scott 1975). Given the empirical results reported in this article, we should expect the extent of earnings dispersion to vary along the

same dimensions. The close relationship that has been shown to exist between organizational differentiation and earnings dispersion will, I hope, stimulate more research along these lines in different national settings. Only then can the generalizability of these results be established.

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# Participation in Heterogeneous and Homogeneous Groups: A Theoretical Integration<sup>1</sup>

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This article presents a theoretical formulation that integrates, within the framework of expectation states theory, theories of the emergence of power-and-prestige orders in status-heterogeneous and homogeneous task-oriented groups. A model based on this theoretical formulation is constructed and used for predicting participation rates in open interaction settings. The article explores the fit of the model to data from both status-heterogeneous and status-homogeneous groups.

## INTRODUCTION

In a recent paper on models of participation in status-heterogeneous groups, which follows up on earlier work (Skvoretz 1981; Smith-Lovin, Skvoretz, and Hudson 1986), John Skvoretz (1988) evaluates data from six-person discussion groups, collected by Lynn Smith-Lovin et al. (1986), in which the gender compositions of the groups are systematically varied from all male to all female. The author's conclusion after assessing the goodness of fit of a number of models to the data is that, while there is an undeniable gender effect, none of the models capture the effect adequately. This result highlights a serious gap in theoretical work on power-and-prestige orders and interaction in task-oriented small groups.

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How power-and-prestige orders emerge through interaction in status-homogeneous groups is fairly well understood. Similarly, how gender and other status characteristics structure the power-and-prestige order in status-heterogeneous groups is also well-known. However, the issue of how these two processes interact, as they must in any setting where there are actors of the same and different status categories at the same time, has been relatively neglected. We propose to fill this gap by integrating theories from two different branches of the expectation states program—the evaluation-expectation branch and the status characteristics branch. We formulate a theory that can account for the emergence of power-and-prestige orders in both heterogeneous and homogeneous groups and captures the feedback of behavior on expectations. Through this theory we explain how behavior can modify status-based power-and-prestige orders with a single and uniform set of concepts and assumptions. We also derive from this theory a model for the prediction of participation rates in discussion groups and evaluate its fit to data from heterogeneous and homogeneous groups.

Since the early documentation by Robert Bales et al. (1951) of the rapid emergence of power-and-prestige orders in status-homogeneous task-oriented groups studied under laboratory conditions, a considerable amount of work has gone into the theoretical analysis of the emergence of status orders in such groups (Bales 1955; Mazur 1973; Berger and Conner 1974; Berger, Conner, and McKeown 1974; Farraro and Skvoretz 1988). Similarly, work on the mathematical modeling of participation rates, which are taken to be a primary indicator of power-and-prestige positions of actors in these groups, has also been extensive (Stefan and Mishler 1952; Coleman 1960; Horvath 1965; Leik 1967; Kadane and Lewis 1969; Fişek 1974). Of this work, that of Berger and his associates are within the framework of the expectation states theoretical research program (Berger 1974) and constitute the evaluation-expectation branch of the program. These theories provide an account of how, in status-homogeneous groups, behavior patterns called cycles or unit action sequences lead to the formation of expectations, which in turn structure the power-and-prestige order.

The other branch of the expectation states research program that is relevant to our current problem is the status characteristics branch. The theory of status characteristics and expectation states (Berger, Cohen, and Zelditch 1966; Berger et al. 1977) is concerned with the effects of diffuse and specific status characteristics on the emergence of power-and-prestige orders in heterogeneous groups. The mathematical version of the theory (Berger et al. 1977) incorporates a formalism that provides guidelines for extending the theory (cf. Berger et al. 1985; Berger, Fişek, and Norman 1989), and that facilitates the construction of specific mathe-

mathematical models. It is this formulation that we will use as the basis of our proposed integration.

The task of integrating the evaluation-expectation and status characteristic branches of expectation states theory within the framework of the mathematical formulation involves three major conceptual issues. The first is obtaining a *conceptualization and formal representation of behavior elements* that fits into the status characteristics framework. The second is the inclusion of *legitimation processes* (Ridgeway 1988; Ridgeway and Berger 1988), which we believe to be relevant to our concerns, within the same theoretical framework. And the third is the development of a *new measure of expectations*, other than expectation advantage, which can be applied to behaviors involving more than two actors at the same time.

## THEORETICAL CONSIDERATIONS

### A Representation of Behavior Elements

Our analysis of behavior uses the concepts of Joseph Berger and Thomas L. Conner (1969, 1974). Task-oriented behavior in the small group can be conceptualized as falling into one of four categories: (1) *Performance output* is an act that is either a problem-solving attempt or an attempt to orient or guide the group's task-performance process. (2) *Action opportunities* are socially distributed chances to perform. (3) *Positive reactions* and (4) *negative reactions* are statements of positive and negative evaluations of performance outputs, respectively.

The simplest interaction cycle or unit action sequence consists of an initial action opportunity, a performance output, and a final reward action. In general, interaction cycles are considerably more complicated than this basic cycle. However, complex cycles can be broken down or "parsed" into sets of basic cycles. An important feature of an interaction cycle is whether it involves accepted or rejected acts. A sequence including a performance output by one actor and a positive reward action by another actor directed to the first is an example of an interaction cycle with accepted acts. Negative reward actions imply rejection of acts. The important point about cycles of accepted acts is that they reflect agreement between the actors involved since the acts are being mutually accepted. This mutuality of acceptance is the basis on which social structures are built.<sup>2</sup>

Our basic contention is that, as interaction in a newly formed group proceeds, behavior cycles will come to occur in stable patterns. Thus

<sup>2</sup> For an extensive discussion of interaction cycles see Berger and Conner (1974).

looking at the interaction between two actors we may find that one is frequently producing performance outputs, and the other is reacting with positive reward actions. It is such patterns that have power-and-prestige implications; they are of special interest for our purposes, and we introduce the concept of behavior interchange pattern to describe them.

A *behavior interchange pattern*, which we will call a behavior pattern for short, is a set of interaction cycles or unit sequences such that all actors involved in the interaction accept the acts, and all cycles have the same power-and-prestige significance with respect to the actors. Thus, the pattern of one actor frequently producing performance outputs and the other(s) reacting with positive reward actions is a behavior interchange pattern that indicates a higher power-and-prestige position for the first actor relative to the other(s). Note however that it is also possible to have a behavior pattern such that one actor produces a great many performance outputs, which another actor dismisses with an occasional word with the first actor assenting. Such a pattern obviously implies a lower power-and-prestige position for the first actor and a higher one for the second. The significance of the pattern is more in the content of the interaction than in its quantity.

The conception of a behavior pattern as a set of cycles or unit action sequences raises certain questions: How many cycles are necessary to make up a set? How consistent must the cycles be in terms of their status significance? We believe both questions to be of an empirical nature. The number and degree of consistency of cycles required to constitute a behavior pattern will be affected by a large number of factors, such as the content of the interaction, the degree of structural development, and the context of the group. Given these considerations, an operational definition of the concept can be given only for specific situations. But for our purposes a theoretical definition is sufficient, and we define the concept from the points of view of the actors involved. That is, for a set of cycles to be a behavior interchange pattern, the actors involved must recognize that one actor has a superior behavior pattern and the other an inferior behavior pattern. Actors may not articulate the notion, and they need not even give it conscious thought, but they will recognize the pattern at some level of perception. Given these considerations we define the term as below.

**DEFINITION 1.** A behavior interchange pattern is a set of task behavior cycles or sequences involving two or more actors, in which the acts are mutually accepted and in which the sequences are consistent in their power-and-prestige significance.

A behavior pattern is made up of two complementary parts, a positive part and a negative part. Thus, when a behavior pattern is established between two actors, one possesses the superior, or positive part, and the

other the inferior, or negative part. Therefore, a behavior pattern is a basis of discrimination between actors. By the same token, behavior patterns also enter into status-organizing processes like other status elements and combine with other status elements in the formation of aggregated expectation states. We use the symbols  $b(+)$  and  $b(-)$  in the graphic representation of status situations to represent the two parts of behavior patterns. The two parts are connected by a dimensionality relation that represents both their linkage and opposition to each other.

A second basic concept, that of a *status typification* (cf. Berger and Luckmann 1966), provides the linkage of behavior patterns to the task. Status typifications are classifications of behaviors into differentially evaluated types or states. Status typifications are abstract conceptions of what high- and low-status behaviors are like and are socially constructed. Dual terms like "leader-follower" and "initiator-reactor" are expressions of these abstract constructions. We represent the two typification states as  $B(+)$  and  $B(-)$ . Typification states are relevant to states of abstract task ability, which are induced elements in the theory of status characteristics and expectation states. Behavior-pattern parts are obviously relevant to typification states, and the basic theoretical idea is that, when behavior patterns occur in a group, typification states become salient and provide paths linking actors to the task.

The ideas we have presented are simple and straightforward, so much so that one might question the necessity of their being treated formally as we propose to do. However, their formal treatment within the same framework as status characteristics enables us to analyze situations in which intuitive understanding of status processes is not possible.

### Legitimation

The need to include legitimation dynamics in the current integration stems from the literature on gender differences in task-performing groups (see Meeker and Weitzell-O'Neill [1985] and Wagner [1988] for reviews of this literature). An important finding is that females have trouble assuming leadership roles and exhibiting leadership behaviors. This is true not only for mixed gender groups but for all-female groups. Ridgeway (1988) has suggested that, in all-female groups that function in male-dominated social contexts, the diffuse status characteristic gender becomes salient and prevents the females from assuming leadership roles. The idea that diffuse status characteristics have moral and normative expectations as well as task-performance expectations associated with them (Berger et al. 1966; Berger, Rosenholtz, and Zelditch 1980) has always been a part of the conceptual armory of expectation states theory.

Within the expectation states framework two theories have elaborated the ideas necessary for the treatment of legitimation dynamics. Reward-expectations theory (Berger et al. 1972, 1985) describes and explains how status characteristics lead to the formation of reward expectations in status situations. Ridgeway and Berger in their theory of legitimation (1988) argue that high- and low-valued status positions can be treated as instances of positively and negatively valued reward objects. From this perspective, the legitimation process can be described in terms of the expectations that are formed for actors possessing, on the basis of all their salient external status characteristics, high- and low-valued status positions in the group. Their basic argument is that the greater the differentiation that develops in the group between expectations for high- and low-valued status positions, given that these expectations are consistent with those for task performance, the greater the likelihood that the power-and-prestige order becomes a legitimate one.

Behavior patterns are intrinsically relevant to legitimation processes because, as well as conveying status information, they show actors validating other actors' power-and-prestige positions. The importance of validation in legitimation processes has been clearly demonstrated by the works of Zelditch and his associates (Zelditch and Walker 1984; Walker, Thomas, and Zelditch 1986).

Our conception of how the legitimation of the power-and-prestige order occurs through the emergence of behavior patterns in an informal task group of previously unacquainted individuals involves two key theoretical notions: as actors interact, behavior patterns will begin to appear; these patterns tend to form a configuration that will be (1) "clustered" and (2) "transitive." By clustered we mean that the initial behavior patterns to appear will involve a small subset of actors rather than be distributed among many. The first behavior pattern to be established between two actors, A and B, with A possessing the superior part, has the effect of raising A's and lowering B's status with respect to all the other actors. Therefore, A is more likely than any other actor to produce performance outputs, to be addressed, or to be given an action opportunity. That is, A is the actor who is most likely to be involved in the next behavior pattern to emerge in the situation. On the other hand, not only is B less likely to produce performance outputs than the other actors, but also B is likely to be the target of actors who are behaving strategically. Therefore, B is also more likely than the other actors to be involved in the next behavior pattern to emerge. Thus, at any time, a new behavior pattern is more likely to involve an actor who was involved in a previous behavior pattern than an actor who was not involved. Therefore, behavior patterns will tend to be clustered among a subset of actors rather than scattered among the entire set.

By saying that the configuration of behaviors will be transitive, we mean that, if actor A and actor B possess the positive and negative parts of a behavior pattern, respectively, and if actor B and actor C similarly share the positive and negative parts of a behavior pattern, then, if actor A and actor C share a pattern, actor A will possess the positive part, and actor C will possess the negative part. That is, the actors can be linearly ordered in terms of their possession of behavior patterns. It is reasonable to assume that, if A observes B deferring to himself or herself and C deferring to B, A is unlikely to defer to C.<sup>3</sup>

The properties of clustering and transitivity present a picture of power-and-prestige order formation in which a "nucleus" or "core" forms and increases to a reasonable size—large enough to serve as a decision-making body or an executive for the group. The same properties also make it probable that the core will have an internal structure such that there will be one actor with a number of positive and no negative parts of behavior patterns. This actor may become the legitimate leader of the group. Whether this will come about will depend on the actor's amount of support, that is, the number of positive pattern parts the actor possesses, and the actor's reward expectations. The amount of support necessary will depend on situational factors, and the reward expectations will depend on the status characteristics of the actor. We should point out that this process is only one of many ways in which the power-and-prestige order of a group may be legitimated, but that this process is particularly relevant to informal task groups of previously unacquainted individuals.

When the power-and-prestige order is legitimated, the actors come to behave as though they had socially defined status positions, positions that have normative rights, privileges, and duties associated with them. Obviously the top, or leadership, position is of special importance in a legitimate order, as the leader is assigned special executive rights. In particular, the leader has the right to address the group as a whole, and this has significant implications for the patterns of participation in the group.

<sup>3</sup> The assumption as well as the previous argument, which assumes that the three actors A, B, and C are not discriminated by status characteristics, is motivated by results presented by Chase (1982). Farraro and Skvoretz (1988) have presented a formal analysis of Chase's results and formulated a general theory of dominance orders. At the same time, although we know of no application of social learning theory to interaction patterns in small groups, it is clearly the case that these assumptions are consistent with the general principles of that theory as well (Rotter 1954; Bandura 1977).



## An Expectation Measure for Multiactor Situations

Expectation states theory normally speaks of the power-and-prestige position of an actor with respect to a single other actor, and the measure of relative expectations is the *expectation advantage*, which is defined as the difference between the actor's expectations for self and those for the other. However, for multiactor situations such as the ones we are concerned with, this measure is not appropriate since an actor can be simultaneously interacting with more than one other actor. Therefore, we need a measure that can place an actor on the expectation dimension with respect to a number of other actors simultaneously. We proceed as follows.

The model generates actors' expectation values, which are measured on a scale running from minus one to plus one. While such scaling reflects the qualitative significance of expectations, it makes multiple comparisons difficult to formulate algebraically. Therefore, we begin by adding one to each expectation value, making them all nonnegative. We can then formulate a measure by dividing each of these new values by their sum over all the interactants in the situation. These operations can be symbolically expressed as below.

$$s_i = \frac{1 + e_i}{\sum_{j=1}^n (1 + e_j)}.$$

The measure  $s$  represents what we call "expectation standing," with the subscript identifying the actor in question. The  $e$ 's stand for expectation values for the actors, and  $n$  is the number of actors in the situation. The  $s$  represents the proportion of the total expectations in the situation for an actor and thus places an actor on the expectation dimension relative to all others in the group.

## THEORY AND MODEL

Given the theoretical considerations of the previous sections we can formulate an extension of the theory of status characteristics and expectation states that applies to multiactor, status-heterogeneous, and status-homogeneous situations. We first formulate a general theory and then construct a specific model based on the theory for Bales-type discussion groups.

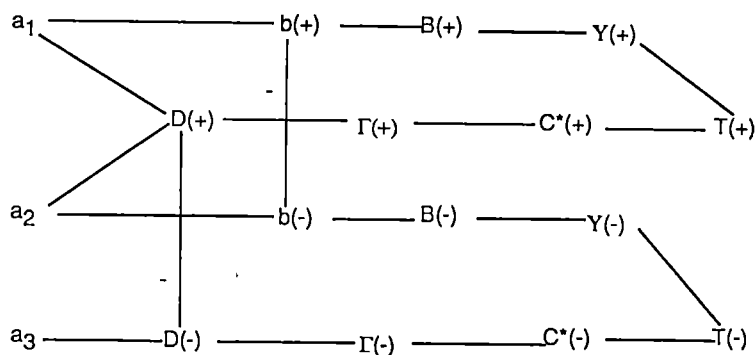


FIG. 1.—A situational structure with two male actors with a behavior pattern between them and a female actor. All unsigned lines are positive.

## The Theory

The scope of the formulation covers collectively oriented task groups. The task must be valued, and the actors must take each others' behaviors into account in performing the task. The actors may, or may not, be discriminated by diffuse or specific status characteristics. We refer to a situation that fulfills these conditions as an *S* situation. We construct a graph diagram to represent the structure of an *S* situation (see fig. 1). This diagram is constructed from the point of view of one particular actor. However, at this point we assume that there is consensus, so that the structure is the same from the points of view of all the actors in the situation.<sup>4</sup> Actors and status elements, such as states of status characteristics that are salient in the situation, are represented as points in the graph structure. Three relations, represented by signed lines in the graph, can hold between these elements: actors may *possess* states of status characteristics, and a state of one status characteristic may be *relevant* to a state of a different status characteristic. Possession and relevance are "positive" relations. The third relation, which is "negative" and is called *dimensionality*, holds between the two differentially evaluated states of the same characteristic possessed by actors in the situation, such as male and female, indicating their linkage and opposition. The graph of the situation always contains two elements that represent outcome states: these are  $T(+)$  and  $T(-)$ , success and failure at the task, respectively. Two other points representing the high and low states of the

<sup>4</sup> Situations where actors have different points of view of a given situation are, obviously, of special substantive interest. However, the modeling of such situations is something to be attempted in the future after we model the simpler situations where there is consensus.

instrumental ability (i.e., the ability that is necessary for successful task performance) are also in the graph of the situation, and these elements are relevant to the similarly signed task outcome states. Thus, the initial graph of any  $S$  situation consists of a set of unconnected points representing the actors in  $S$ , two task outcome states, and two states of the instrumental ability,  $C^*(+)$  and  $C^*(-)$ , which are relevant to the outcome states.

The initial structure is completed through the *salience* and *burden-of-proof* processes. There are two conditions under which status characteristics become salient—when they are initially relevant to the task or when they discriminate between the actors in the situation. It should be noted that salience is a theoretical state and not a question of visibility. A status characteristic that does not satisfy these conditions is not predicted to become salient even though it is highly visible. Similar conditions need to be stated for the salience of behavior patterns.

There are many theoretically reasonable relations that may obtain between the salience of status characteristics and behavior patterns. Until we learn more about these elements we apply the principle of providing relevant information to the salience of behavior patterns as well. A behavior pattern,  $b(+)$  and  $b(-)$ , will become salient if it provides new status information in the situation. If two actors are discriminated by a status characteristic, and a behavior pattern consistent with the status difference emerges, that outcome is consistent and provides no new information. If, however, the emergent behavior pattern is inconsistent with an existing status characteristic difference, then the pattern will become salient. Similarly, when actors are not discriminated by status characteristics, behavior patterns provide new bases of status differentiation, and therefore they will become salient.<sup>5</sup>

ASSUMPTION 1\*: *The salience of behavior interchange patterns.* Given a behavior interchange pattern that occurs between an actor and one or more other actors, the states of the behavior interchange pattern will become salient (i) if the actors are not discriminated by other status elements or (ii) if the parts of the behavior interchange pattern are inconsistent with status elements that discriminate the actors.

The burden-of-proof assumption of the core theory describes how salient status elements that are not connected to the task at the outset become connected. The name reflects the basic principle that unless a status element is explicitly dissociated from the task, it will come to be connected to the similarly signed task outcome state; that is, positive

<sup>5</sup> We use asterisks after the assumption numbers to indicate assumptions that are meant to be taken in conjunction with the assumptions of the Berger et al. (1977) original formulation with the same number.

elements will become relevant to success and negative elements will become relevant to failure, even if indirectly. The same principle applies to behavior patterns. When they become salient, the status typification states,  $E(+)$  and  $B(-)$ , to which they are relevant, become activated, and through the burden-of-proof process these states become relevant to like-signed states of abstract task ability.

ASSUMPTION 2\*: *The burden of proof through status-typification states.* Given that a behavior interchange pattern is salient, its relevant status-typification states will be activated. These states will become relevant to similarly evaluated states of abstract task ability, and the latter will become relevant to similarly evaluated outcome states of the task.

The sequencing of the structure-completion assumption of the core theory describes how the salience and burden-of-proof assumptions operate to further complete the situational structure as new actors become interactants and new status characteristics become salient in the situation. We need to add to this assumption that the structure will be further completed as new behavior interchange patterns emerge in the situation. Each new behavior pattern, if it becomes salient, will result in structure development, and expectations will be changed or modified.

Behavior patterns, unlike status characteristics, are temporal in nature. That is, they refer to behavior that occurs over time, and a salient behavior pattern need not be observable at all times. We believe that once a behavior pattern is established and becomes salient it will remain salient even if it is not observable. However, a new behavior pattern that reverses the parts of the actors may become salient, in which case the older pattern is replaced. Thus, if there is a salient behavior interchange pattern such that actor A defers to actor B but over time a new behavior interchange pattern emerges such that actor B defers to actor A, it is not so much that a new status element has been added to those existing, but that a status element has been changed. The new pattern replaces the old, and the earlier pattern is no longer a part of the structure.

ASSUMPTION 3\*: *Structure completion of behavior patterns.* Every time a new behavior interchange pattern becomes salient, the structure will be further completed. If a new behavior interchange pattern emerges in which the pattern parts possessed by two actors are reversed, then lines joining the actors with these new pattern parts are added to the graph structure replacing the old possession lines, which are dropped.

Figure 1 shows a situational structure with two male and one female actors designated as  $a_1$ ,  $a_2$ , and  $a_3$ . The task is not sex typed, but the diffuse status characteristic, gender, which we designate by  $D$  in our diagrams, discriminates between the actors and therefore becomes salient in the situation. A behavior pattern, represented by  $b(+)$  and  $b(-)$ ,

between the two males has emerged, and the behavior pattern and its typification states, represented by  $B(+)$  and  $B(-)$ , also become salient as the two males,  $a_1$  and  $a_2$ , are not discriminated by a status characteristic. Since the diffuse status characteristic is not initially relevant to the task, it becomes task connected through the activated states of generalized expectations represented by  $\Gamma(+)$  and  $\Gamma(-)$ , and the structure is completed.

Given the graph structure we determine the lengths and signs of the paths connecting each actor to the task outcome states.<sup>6</sup> In this example, actor  $a_1$  is connected to the positive task outcome state ( $T[+]$ ) by two positive paths of four lengths and to the negative outcome state ( $T[-]$ ) by two positive paths of five lengths for a total of four positive paths. We assume that the strength, or the contribution to expectations, of each path is given by a function  $f(i)$ , where  $i$  is the length of the path. The function yields values in the range  $(0,1)$  and is a decreasing function of path length. The formation of aggregated expectation states assumption describes how expectations for actors can be computed from the strengths of the paths connecting them to the task outcome states.

**ASSUMPTION 4: Formation of aggregated expectation states.** If an actor  $x$  is connected to the task outcome states by sets of positive and negative paths, these paths will first be combined within like-signed subsets to yield a positive-path value  $e_x^+$  and a negative-path value  $e_x^-$  in the following fashion. Given strengths  $f(i), \dots, f(n)$  and  $f(i'), \dots, f(n')$  of paths within the positive-path subset and negative-path subset, respectively, then:

$$e_x^+ = 1 - [1 - f(i)] \dots [1 - f(n)],$$

$$e_x^- = - \{1 - [1 - f(i')] \dots [1 - f(n')]\}.$$

The aggregated expectation state is then given by

$$e_x = e_x^+ + e_x^-.$$

The important point to note is that behavior interchange patterns enter into the formation of aggregated expectations exactly as other status elements do and combine with them in the formation of expectations. This unified treatment of different status elements allows us to capture the entirety of the "expectations-to-behavior-to-expectations" cycle within one formulation. We can now describe the emergence of power and prestige orders on the basis of status characteristics, behavioral feedback, and the combination of both status characteristics and behavior. In this way the formulation can be used to explain and to predict behavior in both heterogeneous and homogeneous groups.

<sup>6</sup> For a detailed description of path counting see Berger et al. (1977).

Expectation standings are assumed to be the determinants of the power-and-prestige order. We present below a version of the basic expectation assumption, formulated for more than two actors.

**ASSUMPTION 5: *Basic expectation assumption.*** Given that  $p$  has formed aggregated expectation states for self and others,  $p$ 's power-and-prestige position will be a direct, continuous function of  $p$ 's expectation standing in  $S$ .

This assumption has been stated in general terms, and we express these concepts in functional form when we construct specific models. However, before we undertake specific model construction, legitimation effects need to be included in the formulation. We believe that, if a sufficiently large number of actors establish behavior patterns with respect to one other actor such that the one actor possesses the positive pattern part in all cases, then they will all come to behave as though that actor was their legitimate leader. We believe that this can happen provided that the others in the group do not hold expectations that the top actor, on the basis of all his salient external status characteristics, will possess a low-valued status position in the group (Ridgeway and Berger 1988).

**AUXILIARY ASSUMPTION 1: *Legitimation on the basis of behavior patterns.*** Assume that a sufficiently large subset of actors have formed low-high behavior patterns with respect to the top actor in the power-and-prestige order. Assume further that the actors in the group do not hold expectations that the top actor will possess a low-valued status position in the group. The actors will come to behave as if the top actor's power-and-prestige position is a legitimate one.

This assumption is called the "legitimation on the basis of behavior assumption" because, as we have noted before and as the literature suggests (Ridgeway and Berger 1988), legitimation of the power-and-prestige order can come about in different ways. The implication of the assumption is that legitimation results in a change for the top actor in how expectations are translated to behavior. As the previous discussion suggests, this change is of special importance for the behavior of the top actor in the power-and-prestige order as he or she takes on a leadership role. The assumption tells us that the prediction function has to have a different form for groups with and without legitimated power-and-prestige orders.

### The Specific Model

The formulation is quite general. Within its scope conditions, the effects of a number of situational variables may result in quite different configurations of behavior patterns. Different kinds of groups operating under

different conditions can develop linear structures, segmented structures, incomplete structures, or even no stable structures at all. Furthermore, different kinds of power-and-prestige behaviors may be different functions of expectation standing. Therefore, it is necessary to construct specific models for given types of groups and given kinds of power-and-prestige behaviors by making additional assumptions about the process of emergence of behavior patterns and the functional relationship of behavior to expectations. We will now construct such a specific model for predicting participation rates in the Bales group setting.

The pertinent features of the Bales group setting are that it is a laboratory situation where a number (usually 2–12) of previously unacquainted subjects are given a discussion task, such as a human relations case, and are asked to reach a group decision in a limited amount of time. The subjects have no expectations for extended interaction as a group and therefore are unlikely to have a high level of personal investment in the group.

The time limitation forces the group to develop a structure quickly, and the need to reach a group decision, coupled with the relative lack of personal investment, works against status struggles, although they do occur. These conditions also make it unlikely that behavior patterns develop inconsistently with any existing status characteristic differences or that established behavior patterns get reversed during a group session. Furthermore, the fact that behavior patterns can be observed by all actors makes it unlikely that behavior patterns emerge in intransitive configurations. At the same time, the literature on Bales groups suggests that power-and-prestige orders appear very quickly and are usually linear (Bales et al. 1951; Fişek and Ofshe 1970). We therefore make the simplest assumption that will generate a unique pattern consistent with these points.

**SPECIFIC MODEL ASSUMPTION 1.** In the Bales group setting the configuration of behavior patterns develops in a transitive manner consistent with salient status characteristics and is fully completed.

Full completion of the configuration of behavior patterns refers to those patterns that can be salient, that is, those between initial status equals. The assumption is obviously a simple first approximation, but, given the values of the function  $f(i)$ , it enables us to compute expectations for all actors in a given situation. We use the function values, given in table 1, which have been theoretically generated by making assumptions about the shape of the function  $f(i)$  (Fişek, Norman, and Nelson-Kilger 1989).<sup>7</sup>

We next need to estimate the size of the core group necessary to generate a legitimate power-and-prestige order. Our approach to this estima-

<sup>7</sup> These calculations are available from the authors on request.

TABLE 1  
THEORETICALLY DERIVED PATH STRENGTHS

| Path Lengths | Path Strengths |
|--------------|----------------|
| 2 .....      | .6321          |
| 3 .....      | .3175          |
| 4 .....      | .1358          |
| 5 .....      | .0542          |
| 6 .....      | .0211          |

tion problem is quite informal: we look for a reasonable assumption rather than apply formal estimation procedures. Table 2 below gives the rates of participation of the top two initiators for groups of three to eight actors for the original Bales data (Bales 1970).

The top part of the table gives the total rates of participation and displays a trend that was one of the earliest to be noted in studies of Bales groups (Bales et al. 1951): the difference in participation rate between the top two actors increases with group size. However, our discussion of legitimation suggests that it would be more appropriate to look separately at rates of addressing the group as a whole and addressing individuals because leadership is more likely to be manifested in addressing the group as a whole. The rest of the table gives the rates for addressing the group as a whole and as individuals separately. Very much in line with our account of legitimation, the trend of the differences between the two top actors is enhanced when rates of speaking to the group as a whole are considered, but this trend disappears when rates of addressing individuals are considered. Furthermore, the trend is not linear but resembles a step function. The difference in rates is small for groups of three and four actors, increases dramatically for groups of five, and then remains essentially constant. This is again consistent with our account of legitimation and suggests that legitimate leadership may become possible in groups of five.

In formulating prediction functions, one would normally think in terms of parameterized functions so that the effects of variables, other than the independent variable, on the dependent variable can be captured. There is no question that the degree of differentiation in the rates of participation will be affected by contextual variables such as degree of task orientation and the importance of the task. However, we shall start out by trying the simplest possible functions, even if they involve no parameters.

Since the legitimation assumption implies that the functional relation of expectation standing to behaviors will change with legitimation, we



TABLE 2  
 PARTICIPATION RATES OF THE TWO TOP ACTORS IN THE  
 ORIGINAL BALES GROUPS BY GROUP SIZE

| ACTOR           | GROUP SIZE |      |      |      |      |      |
|-----------------|------------|------|------|------|------|------|
|                 | 3          | 4    | 5    | 6    | 7    | 8    |
| Total:          |            |      |      |      |      |      |
| One .....       | .444       | .322 | .469 | .431 | .431 | .398 |
| Two .....       | .327       | .289 | .219 | .188 | .152 | .166 |
| To group:       |            |      |      |      |      |      |
| One .....       | .512       | .365 | .707 | .621 | .638 | .577 |
| Two .....       | .272       | .291 | .119 | .131 | .087 | .090 |
| To individuals: |            |      |      |      |      |      |
| One .....       | .393       | .296 | .271 | .288 | .247 | .249 |
| Two .....       | .363       | .288 | .302 | .231 | .209 | .229 |
| N .....         | 26         | 89   | 9    | 18   | 15   | 8    |

need two different functions: one function for predicting rates of speaking to the group as a whole when the power-and-prestige order is legitimated and another function for predicting the other rates of participation.

Considering the relationship between expectation standings and participation rates in general, the simplest possible functional relationship is that of equality. Both variables are measured in the same interval (0,1), they both sum to one for a given group, and the substance of the relationship is that the greater the expectation standing, the greater the participation rate. Therefore, we use the identity function in the simpler case, that is, for rates in groups without legitimated orders and for rates of speaking to individuals in groups with legitimated orders. However, something a little more complicated is called for in predicting the rates of speaking to the group as a whole in groups with legitimated orders. When addressing the others as a single entity, the leader is interacting with them as if they were a single individual with status typical for their numbers. The "massed" other's expectation standing is simply expressed as the arithmetic mean of the expectation standings of the others. To obtain the leader's and the others' total share of speaking to the group as a whole from these two expectation standings, we normalize them so that they sum to one. The total share of the others can then be allocated among them in proportion to their expectation standings. These ideas are summarized in the assumption below.

**SPECIFIC MODEL ASSUMPTION 2.** In the Bales group setting an actor's rate of participation will be equal to the actor's expectation stand-

ing, except for the rate of speaking to the group as a whole in groups with legitimated power-and-prestige orders, in which case the rate for the leader will be given by

$$g_1 = \frac{s_1}{s_1 + \frac{1 - s_1}{n - 1}},$$

and for the others by

$$g_i = (1 - g_1) \frac{s_i}{1 - s_1}, i = 2, \dots, n.$$

The first formula gives the leader's rate of addressing the group as a whole. The fraction in the denominator is the mean expectation standing of the others in the group: since expectation standings sum to one, one minus the leader's expectation standing gives the sum of the others' expectation standings, and  $(n - 1)$ , where  $n$  is the number of actors in the group, is the number of others. Thus, the first formula is the normalization of the leader's expectation standing with the mean expectation standing of the others in the group. The second formula gives the rates for the other members:  $(1 - g_1)$  is the others' total share, and the second factor is the actor's expectation standing renormalized by leaving out the leader's expectation standing. This assumption completes the specific model, and we can now predict participation rates for Bales group settings where actors may, or may not, be discriminated by status characteristics.

We will demonstrate the actual computational procedure in terms of one of the cases in the Bales setting that will be used in the assessment of fit. Let us consider one of the Smith-Lovin groups, the three-male/three-female group: the graph of the situation, although not complicated, is too dense to be displayed here; however, its verbal description is straightforward enough. Since gender discriminates the actors it will become salient, and since it is not relevant to the task it will become connected through the burden-of-proof process. This means that each male in the group will be connected to the task by two positive paths of four and five lengths. Similarly, each female will be connected to the task with two negative paths of the same lengths. Since the specific model assumes that behavior patterns cannot be inconsistent with status characteristic differentiation and the formulation asserts that behavior patterns consistent with status characteristics will not be salient, there will be no behavior patterns between the males and the females, but only among same-gender subsets. Since the specific model assumes complete and transitive emergence of behavior patterns, there will be one actor in each

TABLE 3

EXPECTATION STANDINGS OF THE ACTORS IN THE THREE-MALE/THREE-FEMALE  
SMITH-LOVIN GROUPS

| Actors         | Positive<br>Paths*       | Negative<br>Paths*       | Expectations | Expectation<br>Standings |
|----------------|--------------------------|--------------------------|--------------|--------------------------|
| Male 1 .....   | $3 \times 4, 3 \times 5$ | ...                      | .454         | .242                     |
| Male 2 .....   | $2 \times 4, 2 \times 5$ | 4, 5                     | .149         | .192                     |
| Male 3 .....   | 4, 5                     | $2 \times 4, 2 \times 5$ | -.149        | .142                     |
| Female 1 ..... | $2 \times 4, 2 \times 5$ | 4, 5                     | .149         | .192                     |
| Female 2 ..... | 4, 5                     | $2 \times 4, 2 \times 5$ | -.149        | .142                     |
| Female 3 ..... | ...                      | $3 \times 4, 3 \times 5$ | -.454        | .091                     |

\* Number of paths  $\times$  path length.

subset who possesses the positive parts of two behavior patterns with respect to the other two. Therefore, this actor will have four positive paths due to behavior patterns, two of four lengths and two of five lengths, connecting the actor to the task. In each same-gender subset, a second actor will possess one positive and one negative pattern part, and the third two negative pattern parts; each will be connected to the task accordingly. The paths for all six actors are given in table 3.

In this table the first column lists the positive paths, and the second column lists the negative ones. The third column gives the expectations for each actor, which we computed using the path strengths in table 1 and the combining rule. The fourth column gives the expectation standings computed from these expectations. Since this is a group in which legitimation is assumed not to occur, the expectation standings are also the predicted participation rates. That is, the model predicts that the top participator will be male with a participation rate of .242, that a male and a female will tie for the second participation rank with rates of .192, and so forth. Had this group been one where legitimation is assumed to occur, then the expectation standings would be the predictions for participations directed to individuals, and the rates for addressing the group as a whole would be obtained by applying the transformations of specific model assumption 2 to the expectation standings.

#### GOODNESS OF FIT

At this point we need to demonstrate that our theoretical formulation and the specific model we have constructed are consistent with the available empirical evidence. As our starting point was Skvoretz's (1988) work, the first set of data we will examine is that of Smith-Lovin et al. (1986). We have also sought data from other groups in Bales-type settings where

discrimination among actors is systematically provided by status characteristics. We have been able to find one such set of data in a set of studies carried out by E. G. Cohen and her associates (Cohen 1972; Cohen and Roper 1985) that provides data on four-person groups composed of two "high-status" and two "low-status" actors discriminated by one characteristic that is different in each study. We will also assess the fit of the model to this set of data as a further "test" of the theoretical formulation and model. Since our formulation applies to both heterogeneous and homogeneous groups we also need to explore its fit to homogeneous groups. There are a large number of published studies of homogeneous groups in the Bales setting; however, after eliminating studies outside our scope of conditions—that is, those that use appointed leaders or feature role playing instead of normal interaction and those that do not report data in usable form—few remain. Of those that do remain, the original Bales data are by far the largest body of comparable data. Therefore, we explore the fit of the model to the original Bales data as examples of homogeneous groups. Since all the data predate the construction of the model, our evaluation of goodness of fit is not a test of the model as such but an assessment of the consistency of the model with the available data. We evaluate the fit of the model to the mean rates of participation for groups of given size and composition.

Our first assessment of fit is simply the comparison of predicted and observed participation rates for each set of data, and, where possible, we use the standard error of the observed value to assess the goodness of fit. This commonsense approach has traditionally been used with participation rate models for Bales groups (see Kadane and Lewis 1969). The second step is to do a regression of the observed rates on the predicted rates. Regression analysis offers some important advantages in assessing goodness of fit. First, it provides a summary measure,  $R^2$ , for the entire data set. Furthermore, the measure has a very straightforward interpretation as the percentage of the variation explained in the observed by the predicted, and it is a commonly used measure in most quantitative work. Second, examination of the regression coefficients and the residuals can tell us about systematic biases the model might have. However, it should be noted that there is dependence in our data: if the model overpredicts a participation rate for one rank for a given group, it is going to have to underpredict another; participation rates for a given type of group sum to one. This can cause autocorrelation, and, while autocorrelation does not bias parameter estimates, it can cause inflation of  $R^2$  (Hanushek and Jackson 1977; Judge et al. 1985). However, it is positive autocorrelation that inflates  $R^2$ , and, in our case, the structure of dependence should produce negative autocorrelation, and the Durbin-Watson statistic can give warning of positive serial autocorrelation. We reduce

the degrees of freedom of the error variance by one for each type of group in a given data set to counteract the dependence. The regressions are also weighted by the square root of the sample size for each group size and composition since within a set of data there usually are different numbers of given types of groups.

### The Smith-Lovin Data

These data are from six-person groups in the Bales setting, where the sex composition of the groups has been systematically varied from all male to all female. In assessing the fit of the model to these data we encounter the following problem: our model predicts that in all-male and in five-male/one-female groups the power-and-prestige order will be legitimated, so that the participation directed to individuals and to the group as a whole should be predicted separately. But in the published data, participations directed to the group as a whole and directed to individuals are not reported separately. We need to know at least the overall proportion of acts directed to the group as a whole in order to combine the predicted to-individuals and to-group participation rates in our efforts to obtain a predicted total participation rate. Therefore, we estimate this proportion as a parameter by doing a simple grid search optimizing the fit of the regression model for these two types of groups. The estimate we obtain is that 17% of the acts are directed to the group as a whole. We use this value to generate total participation predictions for the all-male and five-male/one-female groups, and reduce the residual degrees of freedom by one in the regression analysis. Table 4 gives the observed and predicted proportions of participation for each initiation rank within each sex for these groups.

In this table, for each group composition the first column gives the predicted participation rate, the second column the observed participation rate, and the third column the sample standard error (SE). Numbers in italic mark those predictions that are more than two SEs away from the observed. For each group composition, the males are listed first in order of their participation rank among themselves; the females are then listed in the same order. Examining the table, we note that out of the 42 predictions 10 differ from the observed by more than two SEs. It is probably the case that the sample sizes are too small to wash out individual differences, so that predictions for particular ranks are not successful. However, the model does capture the general features of the distributions, such as the fact that the proportions of participation for the top actor in all-male and five-male/one-female groups are higher than in the other groups, as predicted by the model. Therefore, we feel justified in looking further at the overall fit of the model.

TABLE 4  
PREDICTED AND OBSERVED PARTICIPATION RATES IN THE SMITH-LOVIN GROUPS

| RANK | ALL MALE |      |      | FIVE MALE/<br>ONE FEMALE |      |      | FOUR MALE/<br>TWO FEMALE |      |      | THREE MALE/<br>THREE FEMALE |      |      | TWO MALE/<br>FOUR FEMALE |      |      | ONE MALE/<br>FIVE FEMALE |      |      | ALL FEMALE |      |      |
|------|----------|------|------|--------------------------|------|------|--------------------------|------|------|-----------------------------|------|------|--------------------------|------|------|--------------------------|------|------|------------|------|------|
|      | P        | O    | SE   | P                        | O    | SE   | P                        | O    | SE   | P                           | O    | SE   | P                        | O    | SE   | P                        | O    | SE   | P          | O    | SE   |
| 1    | .337     | .367 | .041 | .317                     | .372 | .016 | .251                     | .264 | .037 | .242                        | .254 | .020 | .231                     | .312 | .032 | .213                     | .275 | .062 | .273       | .292 | .012 |
| 2    | .209     | .238 | .031 | .193                     | .233 | .013 | .204                     | .174 | .018 | .192                        | .220 | .028 | .173                     | .109 | .026 | .247                     | .271 | .024 | .229       | .229 | .011 |
| 3    | .171     | .143 | .012 | .159                     | .145 | .019 | .161                     | .134 | .016 | .142                        | .100 | .028 | .220                     | .299 | .019 | .202                     | .173 | .025 | .187       | .216 | .007 |
| 4    | .133     | .106 | .018 | .124                     | .122 | .021 | .117                     | .080 | .022 | .192                        | .218 | .051 | .173                     | .155 | .022 | .158                     | .151 | .021 | .146       | .137 | .013 |
| 5    | .096     | .076 | .008 | .089                     | .035 | .011 | .161                     | .207 | .032 | .142                        | .131 | .011 | .126                     | .091 | .015 | .113                     | .075 | .021 | .105       | .086 | .013 |
| 6    | .056     | .070 | .008 | .122                     | .094 | .029 | .107                     | .142 | .050 | .091                        | .077 | .015 | .077                     | .035 | .070 | .066                     | .056 | .015 | .061       | .040 | .015 |
| N    | 5        |      |      | 5                        |      |      | 4                        |      |      | 4                           |      |      | 5                        |      |      | 3                        |      |      | 4          |      |      |

NOTE.—P, O, and SE stand for predicted, observed, and standard error, respectively. The significantly deviant predictions are given in italics. In each group the male actors are listed first. Regression results for the Smith-Lovin data are  $R^2 = .893$  ( $F[1,32] = 332.882$ );  $b = 1.295$  ( $SE = .071$ ); constant =  $-.049$  ( $SE = .013$ ); Durbin-Watson statistic = 2.295 (no significant residuals).

The regression results are given in the notes to table 4. Quite obviously, the  $R^2$  value obtained is quite high. Thus it seems that, although the model's point predictions are off in a number of cases, the model does describe the overall features of the data quite well. Examining the coefficients of the regression equation, we see that the regression coefficient is larger than one by more than two SEs and the intercept is also less than zero by more than two SEs. This indicates that the model is underpredicting the higher participation rates and overpredicting the lower rates. However, the effect is not very large. The residual plots indicate an autocorrelation effect, but the Durbin-Watson statistic is not high enough to indicate a significant first-order serial correlation and is in the negative direction.

There is one further way we can evaluate the goodness of fit of the model predictions to the data. The model predicts the rank positions of the males and the females for each gender composition, so that these orders can be compared to the observed orders. The data are reported in this form in table 5.

There are no measures of concordance for rankings in which the elements ranked are not individually identified. Therefore, we have constructed an ad hoc index the values of which are given in table 5. The index is the ratio of the correctly predicted pairwise orderings to the total pairwise comparisons, excluding the ties. The agreement between the predicted and observed orders is perfect in three cases out of five, slightly off in one case, and not very good in the fifth case. Our general evaluation is that the model does well in describing the overall distribution of participation rates.

### The Cohen Situation Data

E. G. Cohen and her colleagues have conducted a series of studies to develop intervention techniques for changing expectations to counteract the negative effects of status characteristic discrimination in educational contexts (Cohen 1972; Cohen and Roper 1985). Each study in this set contains a control condition used to evaluate the effect of interventions in the experimental conditions. These control conditions meet the conditions of the Bales setting, the only difference being that in most of the studies the task is playing a board game instead of the typical Bales discussion task. However, the actors have to discuss their moves and come to a group decision as to how they are going to move the marker on the game board. The game is not competitive but cooperative, the goal being to reach the target and win as a group as quickly as possible. Each group is composed of four actors, two from a high-status category, and two from a low-status category.

TABLE 5

PREDICTED AND OBSERVED MALE/FEMALE RANK ORDERS IN THE SMITH-LOVIN GROUPS

|             | FIVE<br>MALE/<br>ONE<br>FEMALE |   | FOUR<br>MALE/<br>TWO<br>FEMALE |   | THREE<br>MALE/<br>THREE<br>FEMALE |   | TWO<br>MALE/<br>FOUR<br>FEMALE |   | ONE<br>MALE/<br>FIVE<br>FEMALE |   |
|-------------|--------------------------------|---|--------------------------------|---|-----------------------------------|---|--------------------------------|---|--------------------------------|---|
|             | P                              | O | P                              | O | P                                 | O | P                              | O | P                              | O |
| 1 .....     | M                              | M | M                              | M | M                                 | M | M                              | M | F                              | M |
| 2 .....     | M                              | M | M                              | F | MF                                | M | F                              | F | M                              | F |
| 3 .....     | M                              | M | MF                             | M |                                   | F | MF                             | F | F                              | F |
| 4 .....     | M                              | M |                                | F | MF                                | F |                                | M | F                              | F |
| 5 .....     | F                              | F | M                              | M |                                   | M | F                              | F | F                              | F |
| 6 .....     | M                              | M | F                              | M | F                                 | F | F                              | F | F                              | F |
| Index ..... | 1.00                           |   | .57                            |   | 1.00                              |   | 1.00                           |   | .80                            |   |

We will examine data from five studies in this series. Three of these studies use the game task. Of these studies, one by Mark Lohman (1970) uses black and white junior high school students as subjects. The other two studies, by R. A. Morris (1977) and by Susan J. Rosenholtz (1977), look at the effects of a specific characteristic—reading-ability reputation. Of the four elementary school students who participate in a group, two are reputedly good readers, and two are reputedly poor readers. The remaining two studies, one by K. P. Hall (1972) and one by Marlaine E. Lockheed (1976), use a discussion task and look at male and female subjects who are teacher trainees. The participation rates observed in these groups and the model's predictions are given in table 6.

We do not have the SEs for these observed participation rates and therefore cannot evaluate the closeness of the predictions in such terms. However, the agreement between the predicted and the observed looks reasonable by visual inspection. The average difference between them is .0147; that is, it is less than 1.5%. It is interesting to note that the model predicts that the less active actor of the higher-status category and the more active actor of the lower-status category will have equal participation rates. In four of the five cases, this prediction is in good agreement with the data; in the fifth case, the Hall study, there is a fairly marked differentiation between the two actors. Despite this deviation, our evaluation is that the model describes the data quite well.

The regression results are given in the notes to table 6. The  $R^2$  is high, even higher than that for the Smith-Lovin data. The coefficient of regression and the intercept indicate a tendency to underestimate high values and overestimate low values. This same tendency was also observed for the Smith-Lovin data; as in that earlier case, there is little



TABLE 6  
OBSERVED AND PREDICTED PARTICIPATION RATES IN THE COHEN SITUATION

|          | Predicted | Lohman:<br>Two White/<br>Two Black | Hall:<br>Two Male/<br>Two Female | Lockheed:<br>Two Male/<br>Two Female | Morris:<br>Two Good Readers/<br>Two Poor Readers | Rosenholtz:<br>Two Good Readers/<br>Two Poor Readers |
|----------|-----------|------------------------------------|----------------------------------|--------------------------------------|--|--|
| H1 ..... | .333      | .330                               | .354                             | .329                                 | .364   | .364   |
| H2 ..... | .250      | .230                               | .205                             | .245                                 | .240   | .246   |
| L1 ..... | .250      | .270                               | .278                             | .248                                 | .248   | .237   |
| L2 ..... | .167      | .170                               | .163                             | .174                                 | .147   | .152   |
| N .....  |           | 14                                 | 20                               | 8                                    | 18   | 20   |

NOTE.—Regression results for the data are  $R^2 = .935$  ( $F(1,13) = 260.526$ );  $b = 1.140$  ( $SE = .071$ ); constant =  $-.035$  ( $SE = .018$ ); Durbin-Watson statistic = 2.177 (no significant residuals).

reason to be concerned with this small effect at this stage of theoretical development. Residual plots indicate the existence of autocorrelated error; however, the Durbin-Watson statistic is not large enough to indicate a significant first-order serial effect and again is in the direction of negative autocorrelation. We have to conclude that the model fits this set of data, which includes data from groups with fairly different tasks, with different subject populations, and discriminated by different status characteristics, quite well.

### The Original Bales Data

Finally, we would like to assess the fit of the model of the original Bales data (Bales 1970). Bales data are coded separately for to-individuals and to-group participations, so we can fit the model separately for the two kinds of behaviors. This enables us to evaluate the legitimation aspects of the model in direct terms. Table 7 gives the distributions of the observed and predicted participation rates.

It should be pointed out that the basic initiation rank of actors was determined using total participations by Bales. Therefore, when to-individuals and to-group participations are separated, their orderings can disagree. This can be observed for the top ranks in groups of five. Such a reversal is not consistent with our model; however, the difference in the magnitudes of the two rates is small and, given the small number of groups of this size, need not cause serious concern. In fact, the general agreement between the predicted and observed participation rates seems to be quite good by visual inspection. The mean difference between them is .015, similar to the fits of earlier models (see Kadane and Lewis 1969).

We do two separate regression analyses. One is for the total participation rates in groups with two to four actors (for these groups the model does not predict different to-group and to-individuals participation rates) and the to-individuals participation rates in groups with five to eight actors. The second is for the to-group participation rates in groups with five to eight actors. The results of these regression analyses are given in the notes to table 7.

For the first regression, the  $R^2$  value is large. Both the regression coefficient and the intercept differ from one and zero, respectively, by about one SE. The Durbin-Watson statistic, though on the positive side, is close to two, which is the mean value under the null hypothesis. We conclude that the model fits the data well.

For the second regression, the  $R^2$  value is even higher; however, the Durbin-Watson statistic is quite low—though not low enough to be significant (at  $\alpha = .05$  with  $n = 25$  the critical values of  $D$  are  $D_L = 1.29$  and  $D_U = 1.45$ ). Residual plots also indicate that there is autocorrelation;

TABLE 7  
PREDICTED AND OBSERVED PARTICIPATION RATES IN BALES GROUPS

| RANK | TOTAL PARTICIPATION RATES |      |              |      |             |      | TO-INDIVIDUALS PARTICIPATION RATES |      |            |      |              |      | TO-GROUP PARTICIPATION RATES |      |             |      |            |      |              |      |              |      |
|------|---------------------------|------|--------------|------|-------------|------|------------------------------------|------|------------|------|--------------|------|------------------------------|------|-------------|------|------------|------|--------------|------|--------------|------|
|      | Two Actors                |      | Three Actors |      | Four Actors |      | Five Actors                        |      | Six Actors |      | Seven Actors |      | Eight Actors                 |      | Five Actors |      | Six Actors |      | Seven Actors |      | Eight Actors |      |
|      | P                         | O    | P            | O    | P           | O    | P                                  | O    | P          | O    | P            | O    | P                            | O    | P           | O    | P          | O    | P            | O    | P            | O    |
| 1    | .591                      | .573 | .444         | .444 | .364        | .322 | .311                               | .271 | .273       | .288 | .243         | .247 | .220                         | .249 | .643        | .707 | .652       | .621 | .658         | .638 | .663         | .577 |
| 2    | .409                      | .427 | .333         | .327 | .287        | .289 | .254                               | .302 | .229       | .231 | .208         | .209 | .190                         | .229 | .132        | .119 | .109       | .131 | .094         | .087 | .082         | .090 |
| 3    |                           |      | .223         | .229 | .213        | .228 | .200                               | .209 | .187       | .185 | .175         | .158 | .163                         | .158 | .104        | .088 | .089       | .084 | .079         | .074 | .070         | .090 |
| 4    |                           |      |              |      | .137        | .161 | .146                               | .141 | .146       | .136 | .143         | .128 | .138                         | .125 | .075        | .057 | .070       | .075 | .065         | .066 | .059         | .066 |
| 5    |                           |      |              |      |             |      | .089                               | .077 | .105       | .094 | .111         | .115 | .113                         | .117 | .046        | .029 | .050       | .049 | .050         | .053 | .049         | .048 |
| 6    |                           |      |              |      |             |      |                                    |      | .061       | .065 | .078         | .077 | .087                         | .060 |             |      | .029       | .040 | .035         | .047 | .038         | .048 |
| 7    |                           |      |              |      |             |      |                                    |      |            |      | .043         | .064 | .060                         | .042 |             |      |            |      | .019         | .034 | .026         | .044 |
| 8    |                           |      |              |      |             |      |                                    |      |            |      |              |      | .031                         | .020 |             |      |            |      |              |      |              |      |
| N    | .41                       |      | 26           |      | 89          |      | 9                                  |      | 18         |      | 15           |      | 10                           |      |             |      |            |      |              |      | .013         | .013 |

NOTE.—P stands for predicted and O for observed. Regression results for total (group sizes two to four) and to-individuals (group sizes five to eight) participation rates:  $R^2 = .978$  ( $F(1,26) = 1,446.226$ );  $b = .972$  ( $SE = .026$ ); constant = .006 ( $SE = .007$ ); Durbin-Watson statistic = 1.916 (no significant residuals). Results for to-group participation rates are  $R^2 = .989$  ( $F(1,20) = 2,083.811$ );  $b = .956$  ( $SE = .021$ ); constant = .007 ( $SE = .006$ ); Durbin-Watson statistic = 1.572 (significant residuals = 1).

therefore, spurious inflation of the  $R^2$  is a distinct possibility. However, even given this precautionary note, we will still have to conclude that the fit is good and that overall the model is in good agreement with Bales's original data.

#### SUMMARY STATEMENT

We started out to formulate a theory that could account for the structuring of power-and-prestige orders in both status-heterogeneous and status-homogeneous groups in open interaction situations. We have done so by integrating two theories within the expectation states theory framework, the theory of status characteristics, and the theory of evolution of expectations. We have also introduced elements of legitimation dynamics into the theory. The resulting formulation, which is an extension of the mathematical version of the theory of status characteristics and expectation states, can be used to predict the power-and-prestige orderings in status-heterogeneous and, initially, status-homogeneous groups.

We have constructed a specific model, based on the theory, to predict rates of participation in Bales-type settings. We believe that this model fits the data reported by Smith-Lovin quite well. We have demonstrated that the same model also fits data on heterogeneous groups collected by E. G. Cohen and her associates. We have also shown that the model fits the original Bales data. The goodness of fit in each case, as measured by  $R^2$ , is good. It should also be noted that the model requires very little in the way of estimating empirical parameters. The only such quantities to be used in the assessment of fit presented above were the size of the core group necessary for legitimation and the proportion of to-group participations in the Smith-Lovin data. We believe our formulation, incorporating as it does the full feedback cycle of expectations to behavior and behavior to expectations, has furthered our understanding of the evolution of power-and-prestige orders and is capable of generating further empirical and theoretical research.

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# Human Capital Investments or Norms of Role Transition? How Women's Schooling and Career Affect the Process of Family Formation<sup>1</sup>

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Proponents of the "new home economics" hypothesize that women's growing economic independence largely accounts for the rise in delayed marriage and motherhood in industrialized societies. This article assesses this hypothesis for the Federal Republic of Germany by estimating the dynamic effects of women's educational and career investments on the timing of family events. Event-history analysis shows that the delaying effect on the timing of the first marriage across cohorts does not result from an increase in the quality of women's human capital investments as posited by the new home economics. Rather, women's extended *participation* in schooling delays their transition to adulthood, an effect aligned with normative expectations that young women in school are "not ready" for marriage and motherhood. Increasing career resources, however, do lead women to postpone or avoid having children.

## INTRODUCTION

Recent labor-market studies in the Federal Republic of Germany show that women, more than men, profited from the educational expansion, the developing tertiary sector of the economy, and the expansion of the welfare state. Across cohorts, women have a bigger increase than men at all higher levels of educational attainment (Blossfeld 1985, 1989, 1990),

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and their shift from relatively unskilled production and service jobs to skilled service and administration occupations is more pronounced than that of men (Blossfeld 1987c). Today, young women not only stay longer in the educational system than did women of older generations (Blossfeld and Nuthmann 1989) but are able more than ever to turn higher education into better job and career opportunities (Blossfeld 1987c, 1989). This development is shown in figure 1, which displays the development of the average prestige scores of women of the birth cohorts 1929–31, 1939–41, and 1945–51 over time. For each successive birth cohort of women, the average prestige score starts at a higher level and has a greater slope.

The changing educational and career behavior of young women, and its consequences for women's traditional roles as housewives and mothers, is increasingly discussed in demography and the sociology of the family. One hypothesis, proposed mainly by economists, is that women's growing economic independence (as a result of better education and improved career opportunities) is one of the major factors in the rise in delayed marriage, increasing marital instability, and the decline in fertility (see, e.g., Becker 1973, 1981; Schultz 1973; Zimmermann 1985).

Support for this hypothesis has been claimed on the basis of several empirical analyses. A general account of these studies is given by Lehrer and Nerlove (1986) as well as by Zimmermann (1985). But there are also contradictory findings, for example, by Schwarz-Miller (1981), who does not find that the level of education has a negative influence on the number of children, and by Zimmermann (1985), who claims that the negative effect of gainful employment on fertility could be considered disproved for the Federal Republic of Germany. However, all these studies are based on cross-sectional or aggregated time-series data and therefore can provide neither sufficient nor necessary evidence for a relationship *over time* at the *level of the individual* (Keyfitz 1977; Tuma and Hannan 1984; Bracher 1988; Blossfeld, Hamerle, and Mayer 1989). What is needed to assess the hypothesis of the "new home economics" is detailed time-related data on life courses of individuals. These data allow the use of statistical concepts that relate women's subsequent family decisions to their previous educational and career experiences.

First attempts to approach the relationship between education, labor-force participation, and family decisions using life-course data have been made by Rindfuss and St. John (1983), Rindfuss, Morgan, and Swicegood (1988), Bloom and Trussell (1984), Marini (1985), Diekmann (1987), Hotz and Miller (1988), Huinink (1987, 1988c), Papastefanou (1990), Bracher (1988), Bagozzi and van Loo (1988), Sprague (1988), and Santow (1989). But these authors have not been interested in analyzing how changing educational and career investments—as a lifetime process—influence family formation. Our purpose in this article is therefore to model educa-



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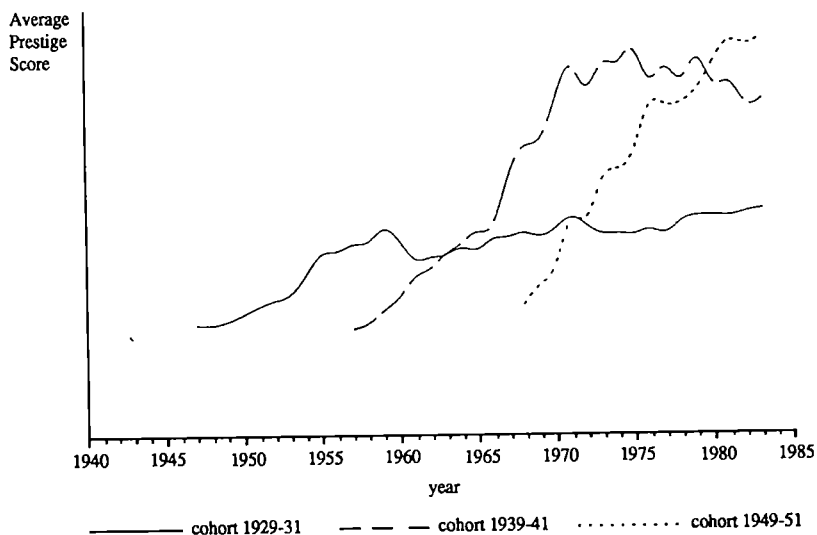


FIG. 1.—Average occupational prestige, by time, of women born 1929–31, 1939–41, and 1949–51.

tional and career investments of women as a continuously changing process over the life course and to estimate their effects on the rate of entry into first marriage and first motherhood, with other important influences controlled for.

### ARGUMENTS IN SUPPORT OF THE HYPOTHESIS OF A DECREASING SIGNIFICANCE OF MARRIAGE AND CHILDREN FOR WOMEN

Especially in the older birth cohorts, women's comparatively poor general and vocational education and their overrepresentation in the lower ranks of the occupational pyramid are closely connected with an orientation toward the traditional sex-specific roles that emphasize women's responsibilities as housewives and mothers (see Handl 1988). In the past, sociologists have argued that this traditional sex-role differentiation is functional for the stability of the family and even for society itself. The most prominent exponent of this research was Talcott Parsons (1959), who argued that different roles for men and women provide an important mechanism for preventing disruptive competition between spouses. In modern societies men have therefore specialized in gainful employment, and women in work within the family and the home.

The importance of sex-specific roles has been also stressed in the economic approach to the family. Gary Becker (1973, 1981), its main proponent, views unmarried men and women as trading partners who decide

to marry if each partner has more to gain by marrying than by remaining single. As in all trading relationships, the gains from marriage are based on the fact that each partner has something different to offer. In most societies women traditionally rely on men for provision of food and shelter as well as protection; and men rely on women for the bearing and rearing of children as well as for the maintenance of the home. This means that the socialization process traditionally induces (1) a comparative advantage of women over men in the household because women invest mainly in the human capital that raises household efficiency, and (2) a comparative advantage of men over women in the labor market because men invest mainly in capital that raises market efficiency. Hence, according to the "new home economics," it is this sex-specific specialization of labor in our society and the mutual dependence it produces between the sexes that provide the major incentive for the partners to marry. On the basis of this argument Becker comes to the conclusion that "the gain from marriage is reduced by a rise in the earnings and labor force participation of women . . . because a sexual division of labor becomes less advantageous" (Becker 1981, p. 248). The effects are that women increasingly delay or even avoid marriage and that marital instability increases.

Becker (1981) has drawn conclusions from his economic approach to the family not only with respect to entry into marriage and its stability, but also in relation to the decision to have children. According to Becker (1981) the production and rearing of children is one of the main purposes of families. Families use market goods and services, as well as the time of parents, to achieve this goal. Because of the sex-specific differentiation of labor in the family, it is especially the mother's time that is the major part of the total cost of producing and rearing children. Increases in the value of women's time as a result of increases in investments in education and career opportunities will therefore immediately affect the relative costs of children. Thus Becker argues that "a growth in the earning power of women raises . . . the relative cost of children and thereby reduces the demand for children" (Becker 1981, pp. 245-47).

To sum up, the hypothesis proposed on the basis of the economic approach to the family is that the significance of marriage and children for women is decreased to the extent that they increase their investments in education and job careers. The higher the level of education of women and the better their job perspectives, the more they will try to postpone or even to avoid marriage and motherhood.

However, there may be other reasons for changes in the timing of family formation (Hoem 1986; Etzler 1987) stemming from educational expansion. Participation in the educational system takes time and affects women's ability to marry and to have a first child. When a woman is

attending school, a university, or vocational training programs in the Federal Republic of Germany, she is economically highly dependent on her parents. Further, there exist normative expectations in society that young people who attend school are "not at risk" of entering marriage and parenthood. Moreover, the roles of students and mothers are sufficiently demanding that most women delay fertility until they have left school (Rindfuss et al. 1988). Finishing one's education therefore counts as one of the important prerequisites for entering into marriage and parenthood (Featherman, Hogan, and Sørensen 1984). This is also true for women as, over the past four decades, their schooling has become more important and their opportunity costs of dropping out of school before completion have risen sharply (Oppenheimer 1988). Apart from the quantity of human capital investments, we therefore expect that there is also an effect of the simple fact that women are participating in the educational system.

### A MODEL OF EDUCATIONAL AND CAREER INVESTMENTS AS A LIFETIME PROCESS

For the purpose of empirically assessing the hypothesis of a negative effect of educational and career investments on family formation in a longitudinal model, we must first solve the problem of how to measure the continuously changing educational and career investments of women. Accumulation of human capital is a lifetime process and must be modeled dynamically as such over the life course. In the Federal Republic of Germany this accumulation takes place in the general educational and the vocational training systems and, after the person enters the labor market, in on-the-job training. This means that it is necessary to differentiate between the accumulation of general and vocational qualifications within the educational system on the one hand, and the accumulation of workplace-related labor-force experience on the other.

#### Accumulation of General and Vocational Qualifications in the Educational System

In order to model the accumulation of general and vocational qualifications in the general school system, the vocational training system, and the university system of the Federal Republic of Germany, we use the average number of years required to obtain them: lower-school qualification without vocational training = 9 years; lower-secondary-school qualification with vocational training = 11 years; intermediate-school qualification without vocational training = 10 years; intermediate-school qualification with vocational training = 12 years; upper-secondary-

school qualification (*Abitur*) = 13 years; professional college qualification = 17 years; university degree = 19 years. To model changes in the accumulation of these qualifications over the life course, we have updated for each woman the *level of education* at the age when she obtained a particular educational rank in this hierarchy. For example, for a woman who attains a lower-school qualification at age 14, reaches the intermediate-school qualification at age 16, leaves school with an *Abitur* at age 19, and finally finishes her studies at the university at age 25, we would obtain a picture of changing levels of education over the life course as shown in figure 2. The explanation of the new home economics is that such increasing levels of education raise a woman's labor-market attachment, thereby leading to greater delays in marriage and childbirth.

However, as we discussed above, we also expect an effect of the fact that women are participating in the educational system. In order to include this influence in our model, we generated a time-dependent dummy variable indicating whether or not a woman is attending the educational system at a specific age (see the lower part of fig. 2).

#### Accumulation of Labor-Force Experience by On-the-Job Training

After leaving the educational system and entering into employment, women accumulate labor-force experience at their workplaces (Becker 1975). Economists (Mincer 1974; Becker 1975) and sociologists (Sørensen 1977; Sørensen and Tuma 1981) have often used time in the labor force as a proxy for the accumulation of labor-force experience. But this procedure can be criticized on the basis of research on labor-market segmentation. First, there is a so-called secondary labor market in the economy, offering relatively low-paying, unstable employment with poor chances of accumulating any labor-force experience at all (see, e.g., Doeringer and Piore 1971). Second, in some positions within so-called internal labor markets the opportunities to accumulate labor-force experience are very unequally distributed (e.g., Doeringer 1967; Piore 1968). Likewise, differences in the opportunity to acquire labor-force experience may also exist among the self-employed and people working in different kinds of professions. This means that the speed and levels of the accumulation of labor-force experience must be modeled as dependent on the type of positions. For the dynamic modeling of job-specific investments in human capital over the life course, we therefore made the three conjectures described below.

1. *Development of career resources after entry into first employment.*—Women who have left the educational system and entered their first job accumulate labor-force experience with decreasing increments. Because on-the-job training is concentrated mainly in the earlier

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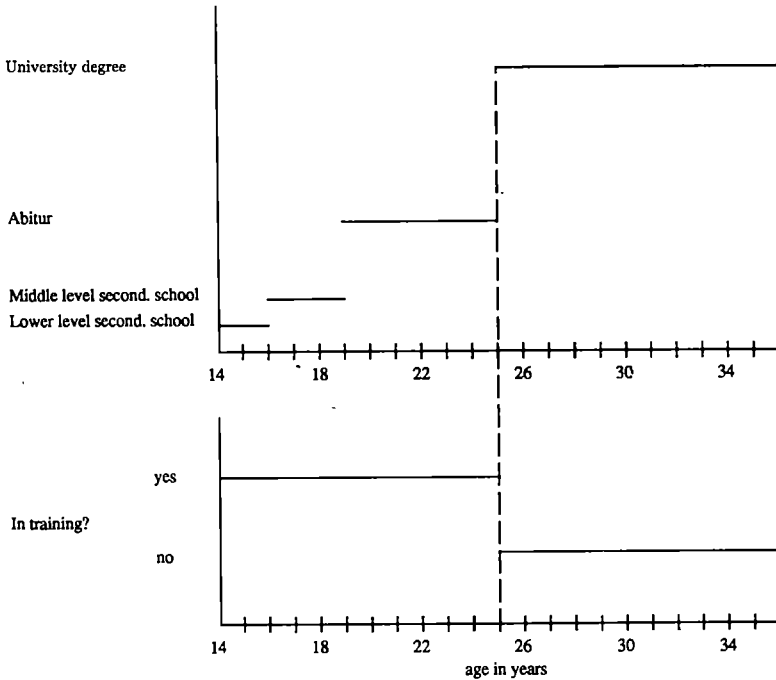


FIG. 2.—Educational career over the life course

phases of employment, increases are large at the beginning and level off with increasing time in the job. This means that increments and final levels of labor-force experience should be modeled with dependence on a measure of the “goodness” of the job, for example, the prestige score,  $P$ , of jobs. The mathematical model of the growth rate  $r(P, t)$  of career resources at age  $t$ , assuming that the first job was entered at age  $t_0$ , is then ( $t \leq t_0$ ):

$$r(P, t) = \exp(-\alpha \times (t - t_0)),$$

where

$$\alpha = (P_{\max} - P_{\min}/2)/P = 83.4/P.$$

Here  $P$  is Wegeners' (1985) prestige score, which is used as a proxy measure for the “goodness” of jobs and for the opportunity to accumulate labor-force experience within a job. Given this model, the level of career resources  $K(P, t)$  within a job episode at age  $t$  is then defined as:

$$K(P, t) = \exp \left[ \int_{u=t_0}^t r(P, u) du \right] - 1.$$

Until entry into the first job, the level of career resources  $K(P, t)$  is equal to zero. The maximum level of career resources,  $\max[K(P, t)]$ , within a job with the lowest prestige score (a helper with a prestige score of 20.0 on the Wegener scale), for example, is reached after nine months and has the value 0.27. For a job with the highest prestige score on the Wegener scale (a medical doctor) the maximum level of career resources is reached after about 9–10 years and has a value of 8.15.

2. *Change of jobs.*—If a woman changes from a job with prestige level  $P_0$  to a job with prestige level  $P_h > P_0$  at time  $t_1$ , which is an *upward move*, here career resources will increase until the maximum career level of the new job is reached. In this case the career function for  $t > t_1$  is:<sup>2</sup>

$$K(P_h, t) = \min\{K(P_0, t_1) + K[P_h, (t - t_1)], \max[K(P_h, t)]\}.$$

If a woman changes from a job with prestige level  $P_0$  to a job with a prestige level  $P_n < P_0$  at time  $t_2$  (a *downward move*), the career resources of the preceding job are linearly decreased over time and the career resources of the successive job are increased over time. However, the maximum career level of the preceding job is considered to be the upper limit. Thus, with increasing time, the level of career resources is decreasing and will approach the maximum career level of the successive job. For  $t > t_2$  the level of career resources is obtained as follows:

$$K(P_n, t) = \begin{cases} \min\{[1 - (1.5/P_0) \times (t - t_2)] \times K(P_0, t_2) \\ \quad + K(P_n, (t - t_2)), K(P_0, t_2)\}, & \text{if } t - t_2 < P_0/1.5, \\ K(P_n, (t - t_2)), & \text{otherwise.} \end{cases}$$

Figure 3 shows an example for the accumulation of career resources if a woman at first moves upward (from job 1 to job 2).

3. *Discontinuity of work experience.*—Besides continuous changes of the level of career resources as a result of upward and downward moves, we also recognize that women tend to have several entries into and exits from the labor force after leaving school because of family events (marriage, birth of children, etc.) (Mincer and Polachek 1974; Tölke 1989; Handl 1983). Given this discontinuity of work experience, the assumption that career resources monotonically increase with decreasing increments over the work life that is normally made for the career process of men in labor-market research (Sørensen 1977) is no longer valid. If women interrupt their work careers, then they will lose career resources that must be reaccumulated when they reenter the labor force. To model the path of labor-force experience of women we therefore assume that career

<sup>2</sup> In the following formula  $\max[K(P_h, t)]$  is the highest value a woman can reach in job  $h$ . The formula  $K(P_h, t)$  then says that her resources equal a value that increases with time, until the maximum level— $\max[K(P_h, t)]$ —is reached.

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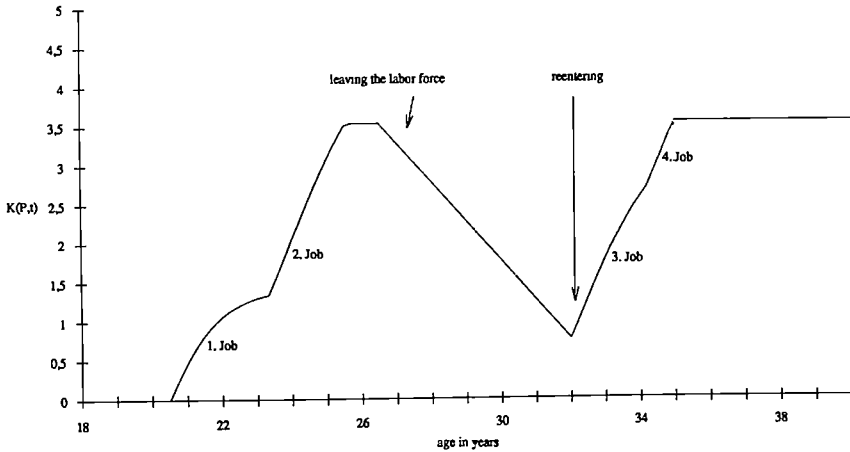


FIG. 3.—Career resources over the life course: an occupational career with a phase of nonemployment.

resources decline when women experience an interruption ( $I$ ) in their work career at age  $t$  as long as women's career resources are still positive. The speed of the decrease is thereby dependent on the prestige level ( $P_0$ ) of the job held immediately before the interruption of the career. For  $t > t_3$  we get:

$$K(I, t) = \max[0, 1 - \{(1.5/P_0) \times (t - t_3) \times K(P_0, t_3)\}].$$

Figure 3 shows an example for a trajectory of career resources including a work interruption, and a reentry into job 3.

## DATA, HAZARD RATE MODELS, AND VARIABLES

### Data

The hypotheses derived from the new home economics are empirically assessed against life histories of 2,171 German respondents from cohorts born 1929–31, 1939–41, and 1949–51, collected between October 1981 and May 1983 by Karl Ulrich Mayer (1979). His objective was to record the life histories of the respondents over sociologically relevant domains (social background, education, job career, family, fertility, housing, etc.). The data were collected retrospectively by asking respondents to reconstruct, with exact dates, their life histories within these domains (Blossfeld et al. 1989; Carroll and Mayer 1986). A detailed description of the study is given by Mayer and Brückner (1989). Lengthy and extensive data editing, data checks, and cross-comparisons vouch for the quality

of the collected information. Several empirical studies assessing the quality of retrospective data and their representativeness show that the German Life History Study satisfies high standards (Blossfeld 1987*b*; Huinink 1988*a*).

Because the data not only cover educational and occupational trajectories but also provide family-history information, we are able to study in a dynamic way how time-related changes in the educational and job career affect the rate of entry into marriage and motherhood. Furthermore, we can at the same time control for other important sources of influence, for example, nonmonotonic age dependencies of rates of entry into marriage and motherhood, influences of social origin, characteristics of the husband, and measures indicating aspects of the development of historical and economic structures.

### Methods

A wide range of statistical tools is available for the analysis of time-related life-course data. A comprehensive overview of these methods of event-history analysis is given, for example, by Blossfeld et al. (1989) and by Tuma and Hannan (1984). We specify as the dependent variable the instantaneous rate of entry into marriage or motherhood, defined as

$$r(t) = \lim_{\Delta t \rightarrow 0} P(t \leq T < t + \Delta t | T \geq t) / \Delta t,$$

$$\Delta t > 0,$$

where  $P(\cdot)$  is the transition probability of entering into marriage or motherhood in the interval  $(t, t + \Delta t)$ , respectively, provided that such an entry has not occurred before the beginning of this interval. Our goal is to specify the rates of entry into marriage and motherhood  $[r(t)]$  as a function of time-constant ( $X_1$ ) and time-dependent covariates  $[X_2(t)]$  in an exponential model:

$$r(t) = \exp[\beta_1 X_1 + \beta_2 X_2(t)].$$

Observation begins at age 15 and ends with the event of first marriage or the birth of the first child or, for right-censored cases, with the date of the interview or age 45, whichever is earlier.

To introduce the time-dependent effects into the rate equation, we use the method of episode splitting (Blossfeld et al. 1989). A separate data record was created at each month. For each record four different pieces of information were provided: (i) time at the beginning and end of the interval to which the record pertains; (ii) the values of the time-dependent covariates at the beginning of these intervals; (iii) whether the interval



ended with an event or not; and (iv) the values of the other covariates relevant for the analysis.

Rate-function coefficients and their  $t$ -ratios are helpful in ascertaining how educational and career investments of women influence first motherhood and first birth, in what direction, and at what level of significance. However, the magnitude of the effects and their substantive significance are more easily assessed by examining survivor functions. Therefore on the basis of the model we estimated survivor functions for different educational and occupational careers that show the probability of a woman's remaining unmarried or childless until age  $t$ :

$$\hat{S}(t) = \exp \left[ - \int_{u=0}^t \hat{r}(u) du \right].$$

### Variables

We used a combination of two variables to control for the well-known nonmonotonic age dependence of the marriage rate and the rate of the first birth (Coale 1971; Bloom 1982). This approach assumes that women are at risk of entering first marriage and of having a first child between the ages 15 and 45 ( $i$  is an index for the  $i$ th one-month interval):

$$\log(D_i) =: \log(\text{current age} - 15),$$

$$\log(R_i) =: \log(45 - \text{current age}).$$

Including these variables in the exponential model as time-dependent covariates,

$$\exp[\log(D_i) \times \beta' + \log(R_i) \times \beta''] = D_i^{\beta'} \times R_i^{\beta''},$$

models the typical bell-shaped curve of the rates of entry into first marriage and first motherhood. This curve is symmetric around the age 30 for  $\beta' = \beta''$ , left skewed for  $\beta' < \beta''$ , and right skewed for  $\beta' > \beta''$ .

As time-constant background variables we include father's social class, residence at age 15 (town vs. country where country is the reference category), number of siblings, and the educational level of the partner. Father's social class was measured as social class 1 = lower working class, social class 2 = upper working class, social class 3 = lower middle class, and social class 4 = upper middle class (Blossfeld 1988). Class 1 is used here as the reference category.

To control for cohort and period effects of general historical and economic developments on family decisions, we introduced two different types of variables. First, we used two dummy variables for the three birth cohorts (reference group = cohort 1929–31) to measure differences

between cohorts. Second, we employed a variable that reflects the continuous development of labor-market conditions. This variable is the result of a factor analysis of 14 different time series indicating a range of aspects of the development of social and economic structures in the Federal Republic of Germany (Blossfeld 1987c). This variable has already proved to be useful in several empirical labor-market studies and can be interpreted here as measuring period effects of the business cycle (see fig. 4). Marriage and childbirth are connected processes. Premarital conception increases the readiness of women to enter into marriage and marriage increases the risk of childbirth. Therefore we also included a time-dependent indicator for pregnancy in the marriage model and a time-dependent indicator for being married in the first-birth model.

## RESULTS

### Effects on the Rate of Entry into First Marriage

Let us begin the analysis with the question of how the improvement of educational and career opportunities of women has affected their entry into first marriage. We find it most useful to control in a stepwise manner for other important influences before we focus on the variables of interest here, namely, the dynamic level of education and the dynamic level of career resources.

All coefficients in the models are metric coefficients, but we will not compare the relative magnitudes of the effects of different variables within models because they depend on the scale by which variables are measured. Instead, we rely on the significance level of variables to determine whether there is an important influence of a variable or not. In evaluating a model's performance, we also use a likelihood-ratio test comparing the model to a baseline. The baseline for all models is model 1, the model of a constant rate. This test gives chi-square values that are reported in tables 1 and 2.

Model 2 in table 1 includes, in a first step, two independent variables— $\log(\text{current age} - 15)$  and  $\log(45 - \text{current age})$ —as discussed earlier. Both coefficients are significant, which means that there is indeed a *nonmonotonic pattern of the marriage rate* in the data. Because the  $\beta$  coefficient of  $\log(45 - \text{current age})$  is greater than the  $\beta$  coefficient of  $\log(\text{current age} - 15)$ , we have a left-skewed bell-shaped path of the rate. This type of structure of the age dependence of the marriage rate remains the same across all models.

Model 3 in table 1 introduces, in a third step, several *social background variables*: father's social class, number of siblings, and type of residence at age 15. These variables are considered important for family formation

## Schooling, Career, and Family Formation

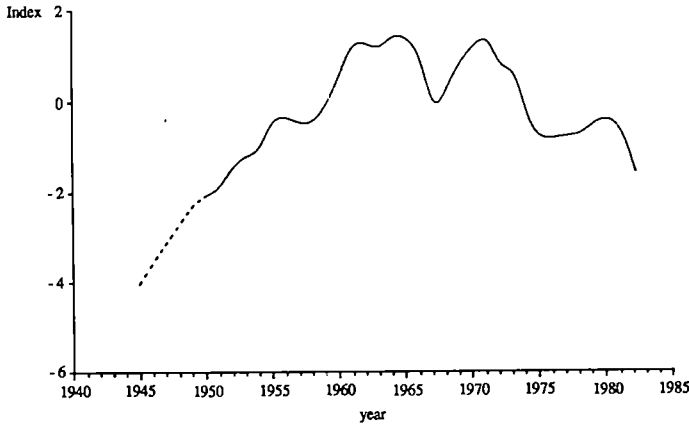


FIG. 4.—Index of economic development in the Federal Republic of Germany between 1945 and 1985.

in the demographic and sociological literature (e.g., Rindfuss and St. John 1983). The number of siblings has no significant effect on the rate of entry into marriage.

More interesting from a sociological point of view are the effects of the dummy variables of father's social class in model 3 of table 1. These estimates show that women from lower social classes marry earlier than women from higher social classes. Theory would suggest that this reflects differences in class-specific resources determining social opportunities for children. These resources constitute not only income positions, properties, consumption styles, and economic strategies of families, but also their social orientations, values, and beliefs, which influence educational and career decisions of children (e.g., Blossfeld 1989; Huinink 1987). In later steps of this analysis we will see to what extent these effects of social origin have been transformed over the life course into prolonged schooling and improved career opportunities and which effect of social class on family formation remains after these influences are controlled for.

In model 3 of table 1 we also observe that entry into first marriage is not dependent on regional differences. Women who grew up in urban residences do not marry either earlier or later than women who grew up in the country.

Model 4 in table 1 incorporates measures of *changes of the historical background* such as cohort membership (modeled as a cohort effect) and economic development (modeled as a period effect). We find no significant cohort effect, but we observe a significant positive effect of the state of the economy (model 4 in table 1). This is to say that women enter into

TABLE 1

ESTIMATES FOR MODELS OF THE RATE OF ENTRY INTO MARRIAGE OF WOMEN OF COHORTS 1929-31, 1939-41, AND 1949-51

| VARIABLES   | MODEL  |         |         |                    |                    |         |          |
|---|--------|---------|---------|--------------------|--------------------|---------|----------|
|   | 1      | 2       | 3       | 4                  | 5                  | 6       | 7        |
| Intercept .....                                   | -4.69* | -17.62* | -17.58* | -17.68*            | -16.28*            | -16.28* | -16.04*  |
| Log(current age - 15) .....                       |        | 1.76*   | 1.80*   | 1.73*              | 1.46*              | 1.47*   | 1.45*    |
| Log(45 - current age) .....                       |        | 3.20*   | 3.27*   | 3.37*              | 3.09*              | 3.09*   | 2.93*    |
| Number of siblings .....                          |        |         | -.00    | .01                | .00                | .00     | -.01     |
| Father's social class 2 .....                     |        |         | -.13    | -.14               | -.08               | -.08    | -.04     |
| Father's social class 3 .....                     |        |         | -.31*   | -.31*              | -.14               | -.14    | -.06     |
| Father's social class 4 .....                     |        |         | .61*    | -.01 <sup>ab</sup> | -.33 <sup>ab</sup> | -.32*   | -.25     |
| Urban residence at age 15 .....                   |        |         | -.08    | -.11               | -.05               | -.05    | -.07     |
| Cohort 1939-41 .....                              |        |         |         | -.04               | -.04               | -.03    | -.05     |
| Cohort 1949-51 .....                              |        |         |         | -.09               | -.01               | -.00    | .00      |
| Economic development .....                        |        |         |         | .19*               | .21*               | .21*    | .18*     |
| In training (dynamic measure) .....               |        |         |         |                    | -.97*              | -.99*   | -.80*    |
| Level of education (dynamic measure) .....        |        |         |         |                    | -.01               | -.00    | .00      |
| Level of career resources (dynamic measure) ..... |        |         |         |                    |                    | -.03    | .04      |
| Is pregnant (dynamic measure) .....               |        |         |         |                    |                    |         | 2.84*    |
| Number of episodes .....                          | 85,404 | 85,404  | 85,404  | 85,404             | 85,404             | 85,404  | 85,404   |
| $\chi^2$ .....                                    |        | 457.80* | 485.55* | 525.01*            | 598.39*            | 598.47* | 1085.47* |
| df .....  |        | 2       | 7       | 10                 | 12                 | 13      | 14       |

\*  $P < .05$ .

TABLE 2

ESTIMATES FOR MODELS OF THE RATE OF ENTRY INTO MOTHERHOOD OF WOMEN OF COHORTS 1929-31, 1939-41, AND 1949-51

| VARIABLES   | MODEL  |         |         |         |         |         |         |          |
|---|--------|---------|---------|---------|---------|---------|---------|----------|
|   | 1      | 2       | 3       | 4       | 5       | 6       | 7       | 8        |
| Intercept .....                                   | -4.97* | -19.33* | -18.82* | -18.59* | -17.64* | -16.03* | -16.72* | -14.21*  |
| Log(current age - 15) .....                       |        | 2.17*   | 2.19*   | 2.08*   | 2.11*   | 1.68*   | 1.76*   | .08      |
| Log(45 - current age) .....                       |        | 3.36*   | 3.30*   | 3.33*   | 3.28*   | 2.84*   | 2.95*   | 2.24*    |
| Number of siblings .....                          |        |         | .04*    | .05*    | .04*    | .04*    | .04*    | .09*     |
| Father's social class 2 .....                     |        |         | -.10    | -.10    | -.03    | -.04    | -.01    | .12      |
| Father's social class 3 .....                     |        |         | -.34*   | -.34*   | -.21    | -.19    | -.18    | -.03     |
| Father's social class 4 .....                     |        |         | -.45*   | -.46*   | -.13    | -.08    | -.05    | .16      |
| Urban residence at age 15 .....                   |        |         | -.23*   | -.47*   | -.18*   | -.17*   | -.18*   | -.23*    |
| Cohort 1939-41 .....                              |        |         |         | -.11    | -.03    | -.07    | -.03    | -.22     |
| Cohort 1949-51 .....                              |        |         |         | -.16    | -.02    | -.05    | .03     | -.57*    |
| Economic development .....                        |        |         |         | .20*    | .19*    | .20*    | .20*    | .07      |
| Partner's education .....                         |        |         |         |         | -.09*   | -.07*   | -.07*   | -.04     |
| In training (dynamic measure) .....               |        |         |         |         |         | -.07*   | -2.24*  | -1.32*   |
| Level of education (dynamic measure) .....        |        |         |         |         |         | .05     | .08*    | .08*     |
| Level of career resources (dynamic measure) ..... |        |         |         |         |         |         | -.39*   | -.18*    |
| Married (dynamic measure) .....                   |        |         |         |         |         |         |         | 3.82*    |
| Number of episodes .....                          | 99,506 | 99,506  | 99,506  | 99,506  | 99,506  | 99,506  | 99,506  | 99,506   |
| $\chi^2$ .....                                    |        | 480.04* | 518.86* | 547.14* | 579.51* | 674.56* | 695.86* | 1744.10* |
| df .....  |        | 2       | 7       | 10      | 11      | 13      | 14      | 15       |

\*  $P < .05$ .

marriage earlier when the economic situation is favorable. In a period of economic expansion, the life-cycle prospects of young people are more predictable, and it is therefore easier for women to make such long-term decisions as entering into marriage (Oppenheimer 1988).

After having controlled for these theoretically important social and economic factors for women's age of marriage, we can now try to answer the question of how important improvements in educational and career opportunities have been for women's timing of marriage.

We look first at the dynamic effects of education. As discussed above, the theoretical importance of education may be viewed from two different perspectives. First, from the perspective of the new home economists, the accumulation of human capital as reflected by an increasing *level of education* increases women's labor-market attachment and thereby leads to greater marriage delays (Mincer 1974; Becker 1975). Second, from a sociological point of view, there exist normative expectations in the society that young people who attend school are not "at risk" of entering marriage. Finishing education, and thus ending the period of economic dependence on parents, should therefore count as one of the important events for *entering into the adulthood status*, and thereby becoming at risk of marriage (Oppenheimer 1988; Blossfeld and Nuthmann 1989). We have constructed dynamic, time-dependent measures for both aspects of the effects of education and included them in model 6 of table 1. This model shows that attending school, vocational training programs, or a university has indeed a strong negative effect on the rate of entry into marriage. However, and this is very interesting, the effect of the *level of education* is not significant. Women's timing of marriage is therefore independent of the quantity of human capital investments. In assessing the consequences of educational expansion on family formation, we can therefore conclude that marriage is postponed because women postpone their transition from youth to adulthood and not because women acquire greater quantities of human capital, thereby increasing their labor-force attachment.

Once we have controlled for educational histories of women, the effects of father's social class prove to be much smaller. In other words, different resources of social origin have been completely transformed over the life course not only in class-structured marriage patterns but also in differential times of school attendance. Parents of higher social classes provide their children with better opportunities to attain higher levels of education and to stay in the educational system longer, thereby delaying their entry into marriage.

Now, we need to assess the role of the improvement of career opportunities in the timing of women's marriage. To do this, we included women's continuous changes of the *level of career resources* over the life

course in model 7 of table 1. Again, and of great interest, this variable proves to be not significant. Women's entry into marriage is therefore apparently independent of their career opportunities.

In model 7 of table 1 a time-dependent pregnancy indicator is included. It does not change the substantive findings above, but its effect is positive and very strong. This indicates that, for women experiencing premarital pregnancy, the marriage rate increases sharply.<sup>3</sup>

To consider changes in the meaning and importance of education and job career across cohorts of women (as a consequence of the educational expansion and the changing occupational structure), we finally included *interaction effects of cohort membership with level of education and level of career resources*. No interaction effect was significant, and they are therefore not reported in table 1.

### Effects on the Rate of Entry into First Motherhood

Let us now consider changes in the age at which women have their first child (table 2). We observe very similar effects for *age dependence* and *social class* in the first four models of table 2 to those in table 1. Because their interpretation is analogous, we do not repeat the substantive explanation. However, different findings emerge for the number of siblings and the variable "urban residence at age 15." The *number of siblings* has a positive effect on the rate of entry into motherhood. The higher the number of siblings, the earlier women have their first child. This is in accordance with findings of earlier studies (Huinink 1987; Huinink and Tuma 1988). Women who grew up in larger families are not only systematically disadvantaged in their educational career but are also more strongly socialized toward a career as a housewife and mother. They are therefore more inclined to have children earlier and to have more children (Huinink 1988b).

The effect of *type of residence at age 15* is significant and negative. Women from rural areas bear their first child earlier than women from urban regions. This is also a well-known finding from other studies (e.g., Huinink 1987; Huinink and Wagner 1989).

Because the *partner's current and future socioeconomic characteristics* are important for the process of family formation, we have also to control for these influences in our model. From a theoretical point of view, level of education, income position, and occupational position of the partner are important. However, longitudinal labor-market studies show that

<sup>3</sup> We know that about one-third of the women in our sample get pregnant the first time before their first marriages. However, only about 7% of all women had an illegitimate child before the interview date (Huinink 1988b).

there is a strong positive correlation between a person's level of qualification and his first job (Blossfeld 1987*b*), his income trajectory (Blossfeld, Hannan, and Schömann 1988), and his career opportunities (Blossfeld 1989). In order to control for the economic position of the partner in the analysis of entry into motherhood it seems therefore to be sufficient to use only one of these characteristics: the educational level (Zimmermann 1985). Model 5 in table 2 shows that the effect of this indicator on the rate of entry into motherhood is negative. This means the higher the level of education—and, thereby, the better the job, income, and career perspectives of the partner—the later women enter into motherhood. We will come back to this effect when we discuss model 8 of table 2.

After having controlled for several important influences in table 2, we include in model 6 *women's continuously changing level of education and an indicator for their participation in the educational system* to explain the rate of entry into motherhood. However, as in the marriage model, the level of education, which measures women's general human capital investments, has no significant influence on the timing of the first birth. Instead, once again, attending an educational institution negatively affects women's rate of having a first child. This means that there exist conflicting time commitments between women's roles as students and mothers (Rindfuss et al. 1988) as well as normative expectations that young women who attend school are not at risk of entering into parenthood. Finishing education, as one of the important steps for entering into the adulthood status (see, e.g., Blossfeld and Nuthmann 1989), thus leads to a steep rise in the rate of entering into parenthood.

If changes in *career resources of women* over the life course are introduced in model 7 of table 2, in contrast to the expectations of the economic approach to the family, the effect of the level of education proves to be even significant and positive. This means that the process of attaining successively higher levels of qualification has an augmenting, rather than diminishing, effect on the rate of having a first child. The reason is that the attainment of increasing levels of education takes time and is connected with an increasing age of women (fig. 2). Women who remain in the educational system longer and attain high qualifications are subject to pressure not only from the potential increase of medical problems with lateness of first births, but from societal age norms as well (i.e., "Women should have their first child at least by 30" [Menken 1985]). Thus, not human capital investments, as claimed by the new home economics, but this increasing pressure might be in force, if the level of education has an effect on the timing of the first birth.

This is also illustrated in figure 5. In this figure we report estimates of the age-specific cumulative proportion childless (survivor function) for



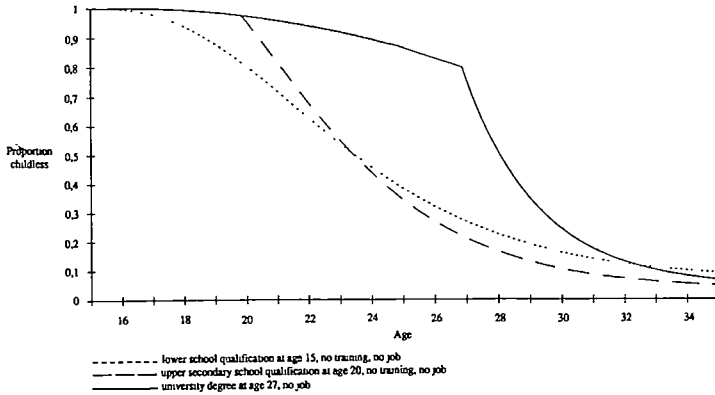


FIG. 5.—Estimated cumulative proportion of childless women by education (survivor function).

different levels of education.<sup>4</sup> The longer women are in the educational system, the longer they delay their first birth; therefore these women show a high proportion of childlessness. After leaving the educational system, those women who have delayed having children catch up with their contemporaries who have less education and who got an earlier start. However, they not only catch up. The positive effect of the educational level pushes the proportion of childless women with upper-secondary-school qualifications (at about age 20) and even those with university degrees (at about age 27) under the proportion of childless women with lower-school qualifications.

A confirmation of the economic approach to the family, however, may be seen in the negative effect of the *level of career resources* on the rate of entry into motherhood (model 7 of table 2). The accumulation of women's career resources conflicts with societal expectations that are connected with a woman's role as mother. Women still take primary responsibility for child care. And women are still disadvantaged in their careers when they must interrupt their work life because of the birth of a child (Ott and Rolf 1987). Women who have accumulated a high stock of career resources, therefore, try to postpone or even to avoid the birth of the first child.

Figure 6 displays examples of age-specific, cumulated proportions childless (survivor function) for ideal-typical career lines.<sup>5</sup> This exercise

<sup>4</sup> These estimates were obtained from model 7 of table 2 by holding constant all other variables at the mean and assuming the women were not employed.

<sup>5</sup> Again these estimates are obtained from model 7 of table 2 by holding constant all other variables at the mean.

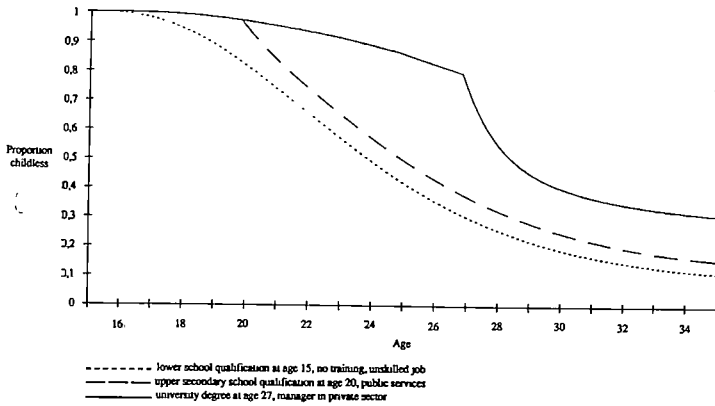


FIG. 6.—Estimated cumulated proportion of childless women for ideal-typical career lines (survivor function).

shows that there is a conflict between career and motherhood. An increase in career opportunities augments the proportion childless at any age.

In model 8 of table 2 we introduced a time-dependent dummy variable that changes its value at marriage and thus shows whether or not a woman was married before the birth of the first child. This variable increases the rate of entry into motherhood remarkably. When this variable is introduced, one can observe that the negative effects of “in training” and “level of career resources” become weaker. Part of their influence is therefore mediated by the marriage process. This is even more pronounced for the effects of “partner’s education” and “economic development,” which both lose their significance. The higher the educational level of the partner, the later women marry and, mediated by the time of marriage, the later women have their first child. One reason for this fact is that there is a high degree of socioeconomic endogamy in the Federal Republic of Germany (Mayer 1977; Haller 1982; Ziegler 1985; Handl 1988). This means that there are important mechanisms of social inequality guiding the process of assortative mating, namely, social networks and differential opportunities to meet prospective spouses in selective social institutions such as schools and universities. Another reason is that better-educated men with good jobs, incomes, and career perspectives need more time to arrive at an age that makes it easier to estimate what long-run socioeconomic position accompanies any potential marriage (Oppenheimer 1988).

The fact that “economic development” also loses its significance after marriage is controlled for means that the more favorable the economic

situation, the earlier women marry, and, mediated by entry into marriage, the earlier they will have their first child.

When marriage is introduced as a time-dependent variable, the effect of cohort 1949–50 becomes significantly negative. This reflects two things. First, young adults of the 1949–51 cohort could leave the parental home earlier and had to marry if they wanted to live together (see table 1). But second, these young adults had better access to contraceptive methods, especially the use of oral contraceptives, that allowed them to control fertility better and to postpone the birth of the first child. This means that there is an increased gap between the time of marriage and the time of the first birth, which also partly explains the sharply increased gainful employment rate of married women.

Finally, we have considered how changes in the meaning and importance of education and job career across cohorts of women (as a consequence of the educational expansion and the changing occupational structure) have affected the rate of entry into motherhood. But again, the *interaction effects of cohort membership with level of education and level of career resources* are not significant. We therefore do not report these effects in table 2.

## SUMMARY AND CONCLUSIONS

Our purpose in this article has been to assess empirically the hypothesis of the new home economics that women's growing economic independence, resulting from better education and improved career opportunities, is one of the major factors in the rise in delayed marriage and motherhood in the Federal Republic of Germany. Using life-history data, we modeled educational and career investments of women as a continuously changing process over the life course and estimated their effects on the rate of entry into first marriage and birth of first child.

First, in analyzing the process of first marriage, we showed that, across cohorts, educational expansion has a delaying effect on the timing of the first marriage. But this effect is not the result of an increase in the quantity of human capital investments of women, as posited by the new home economics. Rather, women's longer participation in the educational system affects their ability to marry. There exist normative expectations in the society that young women who attend school are not at risk of entering marriage. The delaying effect of education on the timing of first marriage is therefore a result of the fact that, across cohorts, educational expansion has increased the time of educational participation and has delayed the transition from youth to adulthood. Accumulation of qualifications takes time and delays these transitions (Blossfeld and Nuthmann 1989).

Women's housewife role in the family and their labor-market attachment proved not to be in conflict. The economic theory of the family, assuming that after marriage women immediately interrupt their market work and invest mainly in qualifications that raise their household efficiency, is therefore in some sense too traditional to describe today's empirical reality. The timing of family decisions of women is influenced neither by their level of education nor by their level of career resources. Support for the hypotheses of the new home economics, claimed on the basis of cross-sectional and aggregated time-series data, is thus probably the result of the methods and type of data used. These are not able to differentiate between the effect of accumulation of human capital over the life course and the effect of participation in the educational system in keeping women out of the marriage market.

Legal marriages were accepted as the only legitimate societal institution of living together during the period between 1940 and the early 1970s. This norm was not affected by the improvement of women's educational attainment and women's job opportunities. Instead of immediately interrupting their work after marriage, women increasingly remained in the labor force (Tölke 1989). And this is exactly what has turned out to be one of the major changes in women's employment after World War II in the Federal Republic of Germany (Müller, Willms, and Handl 1983; Handl 1988). While the labor-force participation of unmarried women has declined over the past 40 years, the labor-force participation of *married* women has increased remarkably (see also Bracher 1988). In Germany, income-tax regulations (the so-called splitting table or *Splittingtabelle*) even provide an incentive for entry into marriage.

The analysis of the effect of educational and career investments on the rate of entry into motherhood has also provided interesting results. Again, prolonged participation in the educational system leads to a delay in women's transition to adulthood and thereby to a delay in their having a first child. Thus, across cohorts, educational expansion retards women's decisions to have children. However, the effect of the level of education on the rate of entrance into motherhood completely contradicts predictions based on the economic approach to the family. Instead of observing a negative sign of women's educational investments, we found a positive coefficient: the process of attaining successively higher levels of qualification increases the rate of having a first child and, as it turns out, decreases the cumulative proportion childless. This is because attainment of increasing levels of education takes time and is connected with woman's increasing age (see fig. 2). More highly qualified women, because they leave the educational system later, come increasingly under pressure from the greater medical problems of late first births as well as

from societal age norms (Menken 1985). Women who stay longer in the educational system and attain higher educational resources catch up with their contemporaries with lower levels of education.

A confirmation of the new home economics, however, may be seen in the negative effect of the level of career resources on the rate of entry into motherhood. In German society there still exists an economically based conflict between women's accumulation of career resources and societal expectations connected with a woman's role as mother. The economic approach to the family is therefore right insofar as women are still primarily responsible for the rearing of children. Thus, women with increasing career resources are faced increasingly with a conflict and try to postpone or even to avoid the birth of the first child. With further improvement of career opportunities of younger cohorts of women, resolving this conflict will turn out to be increasingly important for the society.

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# Aging, Cohorts, and the Stability of Sociopolitical Orientations over the Life Span<sup>1</sup>

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This article examines three hypotheses about the relation between age and the stability of sociopolitical attitudes. The hypotheses are (1) the *impressionable-years* hypothesis, which states that the youngest adults have the least stable attitudes; (2) the *aging-stability* hypothesis, that attitude stability increases with age; and (3) the hypothesis that *symbolic attitudes* are more likely to show distinctive life-cycle patterns of attitude stability than less symbolic ones. The hypotheses are tested using nationally representative panel data from the National Election Study (NES). When results are aggregated over 50 different measures of attitudes, they reveal that in general the youngest adults have the lowest levels of attitude stability, although the difference is not significant. Beyond this, the aggregated data show very few systematic age-related differences, and very few life-span differences in attitude stability are related to the nature of the attitude object; that is, symbolic attitudes do not seem to differ systematically from nonsymbolic attitudes in the relationship of age to stability. However, the examination of intra-cohort patterns of change in stability, using a comparison of stabilities in political party identification across the 1956-1958-1960 and the 1972-1974-1976 NES panel studies, reveals systematic differences that provide clear support for the impressionable-years and aging-stability hypotheses. The decomposition of the stabilities in this measure into components representing "direction" and "intensity" of political partisanship suggests that the intensity component of partisan attitudes declines in stability in old age, whereas the stability of the direction of party loyalties either increases or persists with age. The prevailing model of political socialization—that persons become more "persistent" with age—is reevaluated on the basis of these findings.

<sup>1</sup> Portions of this paper were presented at the 1988 meetings of the International Society of Political Psychology in Secaucus, N.J. The research reported here was

## INTRODUCTION

It is widely recognized that processes of social change and processes of individual change are inexorably intertwined. People may change because aspects of social experience change, and the ways in which people change may influence the nature of society. However, little is known about the relationship between individual (ontogenetic) and historical (generational) development (see Nesselroade and Baltes 1974). Part of the problem is methodological and part is theoretical. For example, it is extremely difficult, if not impossible, to disentangle these processes empirically through the comparison of age groups in cross-sectional measurement. This confounds residues left by unique "cohort" experiences and "aging," and the comparison of single birth cohorts over time confounds aging with "history" (Converse 1976; Riley 1973; Glenn 1981). Moreover, theories about social change generally ignore processes of individual change, and theories of human development and change tend to ignore issues of social change.

An exception to the lack of available theory about the relationship between social and individual change are theories of "aging-stability" (Glenn 1980), "generational succession" (Carlsson and Karlsson 1970; Mannheim 1952; Ryder 1965), and "generational persistence" (Sears 1981, 1983, 1987). From the perspective of these theories, peoples' attitudes are considered to be shaped by socialization experiences early in adulthood and to remain relatively resistant to change after this time. Differences between generations in terms of social and political circumstances and formal socialization experiences produce potentially different attitudinal perspectives. Thus, differences between generations or cohorts may produce social change through processes of cohort succession, that is, the replacement of old cohorts by new ones.

The distinctiveness of certain political eras and the tendencies toward the domination of political parties at the national level during particular periods provide a basis for the assumption that birth cohorts achieving political awareness during the ascendancy of one particular political party

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will be affected by that differential popularity of parties and candidates. Although evidence for cohort or "generational" effects on partisan attitudes and behavior is to be found in only meager amounts, the use of this theoretical interpretation to help understand social change is widespread in the social sciences (Abramson 1983; Riley 1987; Sigel 1989).

There are some empirical findings that are suggestive of support for these ideas. There is widespread support, for example, for the idea that most (but by no means all) social change progresses slowly. In a variety of behavioral domains, such as fertility behavior, marriage, divorce, and migration, social trends are often gradual. This is also true of changes in social and political attitudes. Numerous studies have documented the gradual nature of changes in a wide range of social attitudes, such as attitudes toward free speech, confidence in government and other major social institutions, attitudes toward racial groups, gender-role attitudes, attitudes toward marriage, divorce, abortion, and child rearing, identification with the major political parties, religious orientations, and social values (see review by Alwin [1991]). Such patterns are consistent with, but do not substantiate, the view that ascribes these gradual changes in aggregate societal attitudes to processes of cohort replacement.

Confirmation of cohort-replacement interpretations of social change, however, requires much more than showing that social change occurs gradually. It requires systematic evidence that "cohort effects" actually exist, net of important compositional differences (see, e.g., Alwin 1990), and it requires some evidence that such distinctive residues of cohort experiences persist over time (see Glenn 1980). While it is difficult to separate the influences of aging, cohort, and period influences, it is possible to empirically evaluate the extent to which persons become increasingly stable after some point early in their lives, a hypothesis Glenn (1980) refers to as the aging-stability hypothesis. If such stable tendencies emerge soon after the early adult experiences of a particular set of cohorts or generation, then differences between cohorts may be quite durable in the face of social change. If, on the other hand, individuals are entirely unstable in their orientations over biographical time, or if periods of individual-level instability fluctuate over the life course, then it may be impossible to detect such historical imprinting of cohorts, even if it may have occurred. This second view is consistent with the arguments that people maintain attitudinal flexibility well beyond the earliest socialization experiences (Brim and Kagan 1980; Gergen 1980; Lerner 1984) and that societal-level changes are mere reflections of individual-level changes, instead of being due to unique differences between new and old cohorts (Sears 1981).

There is mounting evidence suggesting that, after a period of relative

instability of sociopolitical attitudes in early adulthood, levels of stability can be quite high throughout the remainder of the life cycle (see Alwin, Cohen, and Newcomb 1991; Marwell, Aiken, and Demerath 1987; Fendrich and Lovoy 1988; Jennings and Niemi 1981). This growing support for the aging-stability hypothesis is, however, often based on small, non-representative samples, and research is often limited to a narrow range of sociopolitical attitudes and sociohistorical experience. We need a broader examination of this issue with more nationally representative samples and a broader range of attitude content before we can make firm generalizations about such issues of generational persistence. Past investigations of the relation of aging and attitude stability using "synthetic cohort" models based on nationally representative panel studies are scarce, and the results of this research are often ambiguous (e.g., Sears 1981).

A second important, unresolved issue in the literature on political socialization is whether this aging-stability model applies equally to all attitude dispositions. Glenn (1980) suggests, for example, that the attitude issues that are the most central in terms of importance are the most stable over the life span. Sears (1969, 1975, 1981, 1983, 1987, 1988) developed a theory of *symbolic politics* in which he argues that sociopolitical attitudes differ in the extent to which they develop early in life through preadult socialization, becoming affectively linked at an early age to a variety of diffuse political symbols. Attitudes thus range in their content along a continuum from highly "symbolic" to "nonsymbolic" (see also Lau, Brown, and Sears 1978; Sears and Citrin 1985; Kinder and Sears 1985). Symbolic attitudes differ from nonsymbolic attitudes in their stability over the life span. Symbolic attitudes are developed through conditioning processes in which attitudes develop a strong affective basis, with little informational or cognitive content. In contrast, nonsymbolic attitudes are assumed to be formed during adulthood, primarily as a consequence of knowledge acquisition and information integration. As a result, symbolic attitudes are thought to be highly stable and resistant to change over time, whereas nonsymbolic attitudes are more likely to change as the result of persuasive arguments and political events.

In this article we examine (1) the relationship between levels of attitude stability and age, examining several hypotheses regarding the age-related differences in attitude stability, (2) the relationship between attitude stability and the symbolic versus nonsymbolic content of the attitude object, and (3) the relationship of age to intracohort changes in the directional and intensity components of partisan attitude stability. Using three-wave panel data, we estimate the relative stabilities of attitudes for different age groups and use these data to examine hypotheses about the life-course trajectories of individual change.

## RESEARCH STRATEGY

In this article we define the stability of attitudes in terms of their correlational stability within age groups or cohort categories. By estimating the differences in stabilities by age and cohort categories, we hope to evaluate the life-cycle patterns in attitudinal stability over the life span. The general hypothesis guiding the analysis is that attitude stability will be lowest during the impressionable years of young adulthood, growing in magnitude over the life cycle, with a possible decrement in the growth of attitude stability in the later years.

Attitude change is, however, confounded with unreliability of measurement in over-time data. That is, the lack of correlation between measures of a variable at more than one time point may reflect lack of stability (or change) in attitudes, or it may reflect unreliability of measurement, or both. Thus, following Converse and Markus's (1979) use of simplex models (see also Achen 1975; Alwin 1988a; Heise 1969; Jöreskog 1970), we apply structural-equation models to disentangle the extent of the true instability of attitudes from the extent of unreliability of measurement. This is important, not only because of the need to separate unreliability from "true" change but also because there is variation in attitude-measurement reliability for the different age groups (see Alwin 1989; Andrews and Herzog 1986). Therefore, in order to obtain the best possible estimate of age-related attitude stabilities, we employ the techniques referred to above to obtain a better purchase on aspects of the age-attitude stability relation than has been heretofore reported.

Although we define the concept of stability in correlational terms, we actually apply covariance structure modeling strategies to covariance rather than to correlation matrices. Since Heise's (1969) important article on the analysis of simplex models using correlation matrices, there has been a debate about how the latent variables should be scaled (see Wiley and Wiley 1970; Cudeck 1989). The analysis of correlations instead of covariances restricts the researcher to standardized latent variables and ignores the actual variances of the variables. In theory, the analysis of covariance matrices imposes fewer constraints on the data. To us this suggested that we try employing both types of models and compare their standardized estimates of stabilities, but, when we did so, the differences proved to be trivial.

We present our results in three parts. We begin by summarizing the results of a broad-based analysis of the relation of age to attitude stability, as defined above, for attitude measures, each assessed in a three-wave panel study with two-year remeasurement intervals. Second, these results lead to the examination of patterns of stability with respect to whether

the attitude objects represent symbolic or nonsymbolic issues. Recent theorizing has suggested that symbolic attitudes are more likely than nonsymbolic ones to follow the expected life-cycle patterns. These hypotheses are tested by analyzing the relation of age to attitude stability within categories of attitude object. Third, the stability of political party identification is analyzed separately, in part because it is the prototypic symbolic attitude, and in part because it is the sole variable for which we have information on stability across the two panel studies. These results are unique, as they represent the only systematic array of changes in levels of stabilities over biographical and historical time. In this context we investigate the question of the stability of the directional versus intensity components of party identification.

## DATA AND MEASURES

To investigate the above issues, we use data from two major sources—the 1956-1958-1960 and 1972-1974-1976 National Election Study (NES) three-wave panel surveys (Campbell et al. 1971; Center for Political Studies 1979). We utilize all attitude measures—50 in all—for which complete three-wave data were available.

### Samples

The data come from two nationally representative three-wave panel studies of the U.S. adult population conducted in 1956-1958-1960 and 1972-1974-1976. These studies were part of the National Election Studies carried out at the University of Michigan, in which cross-sections of Americans were interviewed to track national political participation. In brief, in presidential election years (except 1954), a sample is interviewed before the election and reinterviewed immediately afterward. In the non-presidential election years, only postelection surveys are conducted. Data are obtained from face-to-face interviews with national full-probability samples of all citizens of voting age in the continental United States, except for those on military reservations, using the Survey Research Center's multistage area sample (see Miller, Miller, and Schneider 1980).

In this article we use panel studies carried out within this design in 1956-1958-1960 and 1972-1974-1976.<sup>2</sup> Of the respondents interviewed in 1956, 1,256 were reinterviewed in 1958 and again in 1960. Of the respon-

<sup>2</sup> There was a third NES panel study, conducted with the 1980 election study, in which respondents were reinterviewed at four-month intervals. Because of the incompatibility of this design with the two-year intervals of the 1950s and 1970s NES panels, we have excluded the 1980 data here. Our study of that data has been presented in a separate paper (Krosnick and Alwin 1989).

dents interviewed in 1972, 1,320 were reinterviewed in 1974 and again in 1976. We utilize the following categories of age: 18–25, 26–33, 34–41, 42–49, 50–57, 58–65, and 66–83, assessed in the initial survey year. Thus, although we estimate stability information for these age categories, the data for a particular panel study are essentially cross-sectional with respect to our stability estimates.<sup>3</sup>

Unfortunately, we have only two time periods represented in our data, the mid-1950s and the early 1970s. Thus, we can only speculate about whether there are period effects operating on our stability estimates. However, we are able to compare age differences in stability across cohorts within a panel, as well as compare aging differences across time within cohort categories. As we argue below, the consistency of our findings cannot easily be explained by reference to period effects. Finally, we are able to examine separately two distinct aspects of the stability of political partisanship—direction and intensity—and in so doing address the question of whether the strength of these attitude components increases or decreases with age.

### Measures

Our analyses focus on attitudes that were measured on three occasions in each of the 1956–60 and 1972–76 studies. In each study, at each occasion of measurement, respondents were asked identical questions regarding several categories of political attitudes: (1) political efficacy and alienation, (2) attitudes toward social groups (such as labor unions, the military, the police, whites, Negroes, Republicans, Democrats, liberals, and conservatives), (3) attitudes on domestic policy issues, for example, on the push for civil rights and the desegregation of schools, federally guaranteed employment, protecting the rights of people accused of committing crimes, and on the role of women in the society, (4) ideological liberal-conservatism, (5) political candidate evaluations, and (6) political party identification.<sup>4</sup>

<sup>3</sup> In the 1950s cohorts the youngest cohort contains only 21–25-year-olds because only adults of voting age were interviewed. This means that the youngest 1950s cohort is slightly older than the comparable cohort in the 1970s panel, which contains 18–25-year-olds. We are grateful to Kent Jennings for making us aware of this problem. One implication of this for our research here is that we are likely to err in a direction against our hypotheses when we compare this cohort category (those 21–25 in 1956–1958–1960) with others, since, on the basis of the theoretical predictions of several of the models given above, it is likely to have higher levels of stability than a category containing the full range of persons aged 18–25. We can think of no reason to exclude the youngest respondents in the 1970s panel.

<sup>4</sup> Because of the sheer quantity of information regarding these 50 measures, we do not present the details of question wording, the nature of response categories, response

In addition to analyzing age differences in stability for all of the available attitude measures, we also present a detailed analysis of the stability of distinct aspects of *partisanship*, making use of the party-identification variable. We do so primarily because it is the sole measure replicated across the two panel studies and therefore the only question that is precisely appropriate for our present purposes. Most of the theorizing to date regarding the trajectory of attitude stability over the life cycle has been phrased with respect to symbolic dispositions, such as party identification (see Sears 1983). In addition, the major discussions regarding life-cycle versus cohort interpretations of change in attitudes have occurred with respect to party loyalty and its intensity (Converse 1976; Abramson 1983).

Political partisanship or party loyalty is not an attitude in the conventional sense. It reflects a wider-ranging, and possibly deeper, set of orientations. It measures a person's more fundamental values, his or her beliefs about where a particular party stands on the issues, and the extent to which parties seek to attract persons with particular attitudes. Parties run campaigns on behalf of political candidates and parties have platforms. Thus, an identification with a political party reflects a highly symbolic attitude. The question measuring partisanship in the NES surveys is the following: "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what? (If Republican or Democrat) Would you call yourself a strong (Republican/Democrat) or a not very strong (Republican/Democrat)? (If Independent, no preference, or other) Do you think of yourself as closer to the Republican or to the Democratic party?" We use this measure to assess the direction and intensity of political partisanship (see Converse and Pierce 1987).

## METHODS OF ANALYSIS

We take the position that panel data can make an important contribution to the study of attitude change and stability over the life cycle. Unfortunately, simple correlations of measures replicated over time confounds attenuation due to unreliability of measurement and true attitude change. Thus, we must employ some method to separate unreliability from attitude change (see Alwin 1988a). In this regard, serious flaws exist in previous attempts to estimate the stability of sociopolitical attitudes at different stages in the life cycle. In Sears's (1981) work, for example, attitude stability is estimated by means of bivariate correlations of over-

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codes, and all of the details of our results separately by question. Such a methodological description may be obtained from the first author on request.



time measures, without corrections for random measurement error. But because reliability obviously varies as a function of age, attitude stabilities should be estimated free of random measurement error.

We employ a class of just-identified simplex models that specify two structural equations for a set of three over-time measures of a given variable  $y_t$ :

$$y_t = \tau_t + \epsilon_t,$$

$$\tau_t = \beta_{t,t-1}\tau_{t-1} + \nu_t.$$

The first equation represents a set of measurement assumptions indicating (1) that the over-time measures are assumed to be  $\tau$ -equivalent, except for true attitude change, and (2) that measurement error is random (see Alwin 1988a). The second equation specifies the causal processes involved in attitude change over time. This model assumes that the system is in *dynamic equilibrium* and that this equilibrium can be described by a lag-1 or Markovian process in which the distribution of the true variable at time  $t$  is dependent only on the distribution at time  $t - 1$  and not directly dependent on distributions of the true variable at earlier times.<sup>5</sup>

Estimates of these structural-equation parameters help assess the stability and reliability of reports of attitudes in the NES panel data.<sup>6</sup> In order to estimate such models, we must make some assumptions regarding the measurement-error structure and the nature of true attitude changes (Alwin 1989). All estimation strategies available for such three-wave data require a lag-1 assumption regarding the nature of true attitude change, but they differ in their approach to assumptions about measurement error. One approach assumes equal reliabilities over occasions of measurement (Heise 1969). This is often a realistic assumption and may be useful, especially when the attitude process being assessed is not in dynamic equilibrium. Another approach to estimating the pa-

<sup>5</sup> By dynamic equilibrium we simply mean that the variances of the variable are constant over time (see Bereiter 1962). If this situation does not hold, then this type of simplex model may not be applicable (see Rogosa 1988). We do not mean to imply by this that the stability coefficients,  $\beta_{21}$  and  $\beta_{32}$ , are assumed to be equal.

<sup>6</sup> This, of course, depends on the robustness of the assumptions underlying the simplex model. Perhaps the most risky assumption in this particular case is the Markovian assumption, which puts rather restrictive limitations on the nature of what can be considered "true change." In this context, only change that contributes to monotonic and linear change over the three time points is true change. This essentially "correlational" nature of change may not capture what we might otherwise like to think of as change when the system is not in dynamic equilibrium. Change that does not fit with this model is considered measurement error, at least to the extent it is random with respect to the true distribution.

rameters of this model is to assume constant error variances rather than constant reliabilities (Wiley and Wiley 1970). This is often seen as a less restrictive assumption than that made by the Heise model, but it can produce erroneous estimates if the true distributions increase or decrease in variability over time (Alwin 1983a). We analyzed our data in both ways using Jöreskog and Sörbom's (1986) LISREL VI computer program and found results that were virtually identical for standardized parameters.

#### AGE AND ATTITUDE STABILITY

Using all the available over-time attitude measures from the two NES panels, we estimated standardized coefficients of stability separately by age group. We have summarized these results, averaged over the set of 50 attitude measures, in table 1.<sup>7</sup> In this table, we present three related quantities pertaining to the examination of life-cycle processes in attitude stability. First, we present the average sample estimates of the zero-order correlations of attitudes across the two-year remeasurement interval of the NES panels.<sup>8</sup> Second, we present the average estimates of reliability for the seven age groups. And third, we present the average estimated two-year stability coefficients in standard form.<sup>9</sup> In all three cases we also present the standard errors of these means.

There is no agreed-upon set of procedures in the statistical literature for examining the differences in average levels of attitude stability we present in table 1. Perhaps the most severe problem is that the two stability estimates for a given variable (time-1 to time-2 and time-2 to time-3 stabilities) are not independent. We have examined these differences using multivariate analysis of variance, or MANOVA, which permits multiple nonindependent dependent variables (see Anderson 1984). Using this procedure we consider the seven age categories as the "treatments" in our analysis. We consider the *t*-1 to *t*-2 stability and the *t*-2 to *t*-3 stability as *multiple indicators* of the level of stability for a given age group. Then we consider the 50 separate attitude measures as the cases that are observed within treatment levels.<sup>10</sup>

<sup>7</sup> Because of space limitations, these results are not presented here. Detailed tables of our results may be obtained from the first author on request.

<sup>8</sup> These correlational data are comparable with the type of information used by Sears (1981) to examine these issues.

<sup>9</sup> We use standardized coefficients here because different units of measure were used in these 50 different indicators of political orientations. Thus, we average the standardized results only.

<sup>10</sup> Statistical tests in this analysis involve treating stability coefficients (and, in table 1, reliability and correlation coefficients) as dependent variables within the framework

# Stability of Orientations over the Life Span

TABLE 1

AVERAGE ZERO-ORDER CORRELATION, ATTITUDE STABILITY, AND ATTITUDE  
MEASUREMENT RELIABILITY COEFFICIENTS BY AGE: 1950S AND 1970S  
NES PANEL STUDIES

|                                       | ZERO-ORDER<br>CORRELATIONS |      | RELIABILITY OF<br>MEASUREMENT |      | STABILITY<br>COEFFICIENTS |      |
|---------------------------------------|----------------------------|------|-------------------------------|------|---------------------------|------|
|                                       | Mean                       | SE   | Mean                          | SE   | Mean                      | SE   |
| Age group:                            |                            |      |                               |      |                           |      |
| 18-25 .....                           | .442                       | .021 | .552                          | .030 | .853                      | .032 |
| 26-33 .....                           | .464                       | .019 | .544                          | .023 | .882                      | .028 |
| 34-41 .....                           | .496                       | .019 | .538                          | .022 | .939                      | .019 |
| 42-49 .....                           | .497                       | .020 | .552                          | .023 | .930                      | .026 |
| 50-57 .....                           | .462                       | .019 | .578                          | .044 | .897                      | .034 |
| 58-65 .....                           | .469                       | .019 | .542                          | .028 | .930                      | .033 |
| 66-83 .....                           | .429                       | .022 | .513                          | .032 | .922                      | .039 |
| All .....                             | .466                       | .020 | .546                          | .030 | .908                      | .031 |
|                                       | Zero-Order<br>Correlations |      | Reliability of<br>Measurement |      | Stability<br>Coefficients |      |
| Global test:                          |                            |      |                               |      |                           |      |
| Multivariate <i>F</i> -statistic .... | 1.162                      |      | 1.670                         |      | 1.094                     |      |
| <i>df</i> .....                       | 12,684                     |      | 18,965                        |      | 12,684                    |      |
| <i>P</i> .....                        | .307                       |      | .039                          |      | .362                      |      |
| Youngest vs. all others:              |                            |      |                               |      |                           |      |
| Multivariate <i>F</i> -statistic .... | 1.131                      |      | 2.079                         |      | 1.930                     |      |
| <i>df</i> .....                       | 2,342                      |      | 3,341                         |      | 2,342                     |      |
| <i>P</i> .....                        | .324                       |      | .103                          |      | .147                      |      |
| Oldest vs. all others:                |                            |      |                               |      |                           |      |
| Multivariate <i>F</i> -statistic .... | 2.034                      |      | 2.873                         |      | .798                      |      |
| <i>df</i> .....                       | 2,342                      |      | 3,341                         |      | 2,342                     |      |
| <i>P</i> .....                        | .132                       |      | .036                          |      | .451                      |      |

In the lower part of the table, we present the results of three multivariate statistical tests carried out within the MANOVA procedure. First, we performed a global test of any and all differences among the quantities in a particular column of the table. This hypothesis is theoretically less interesting than subsequent ones, but it does provide an important basis

of a type of meta-analysis. It is not exactly clear what assumptions are involved in treating derived statistics as dependent variables in a second-level analysis, especially since the 50 attitude measures are not independent, in a sampling sense. Thus, we rely on these tests mainly as a rough indication of the magnitude of the effects. The information on statistical tests is given herein not as a basis for generalization to some known universe of attitude measures but to help assess the relationship between age and stability.

from which to derive additional comparisons. Next, we provide a test, based on MANOVA procedures for planned comparisons, in which we examine the significance of the difference between the youngest age group and all others. This embodies a test of the impressionable-years hypothesis in our aggregated results. Finally, we provide a test, again based on MANOVA procedures, for the difference of the oldest age group versus all younger ones. This permits a test of Sears's (1981) hypothesis that attitude stability declines in old age.

The major differences by age that appear to be substantial enough in this table to be interpretable are the estimates of the reliability differences by age. The results indicate that reliability seems to decline in old age. The effect of this on over-time correlations is seen in the average zero-order correlation estimates by age. The lowest average zero-order correlation is for the oldest age group, although these differences only approach statistical significance ( $P = .13$ ). Regardless, the results for age-related differences in both the zero-order correlations and the reliability of measurement are quite compatible with the results reported by Sears (1981).

In the column (col. 5) where we show the age differences in attitude stability averaged over all available measures, we see that stability levels are lowest in the youngest age group and gradually increase through the middle-age categories. Thereafter, attitude stability seems to remain at a relatively high level of average stability into old age. The estimated stability coefficient for the youngest age group was not significantly lower than the average of the remaining age groups, although this difference approaches statistical significance ( $P = .15$ ). In terms of the estimated magnitudes of stability, the levels of reported stability are quite compatible with theoretical expectations, that is, the lowest level of stability is in the youngest age groups, with subsequent increments in stability through old age. There are no other seemingly important differences among these averaged estimated stabilities. Specifically, there were no indications of Sears's (1981, p. 199) suggestion that attitude stability decreases in old age.

On the basis of these aggregate results, there is only weak support for the hypothesis that young adulthood is the period of greatest mutability of social attitudes over the life span. There is some weak support for the hypothesis that attitude stability increases after young adulthood, but there is no marked decrease in attitude stability in the oldest age groups. In fairness to Sears's (1981) speculation that older age represents a second period of increased flexibility of attitudes, however, we should point out that the results we have discussed so far refer to a wide variety of types of attitude measures, from policy attitudes to party identification. That is, we fail to distinguish an important dimension of the phenomenon—the nature of the attitude object. This is important for any examination of

Sears's (1983) theory because he argued that the most persistent are those attitudinal responses that are more symbolic in nature—those that are more affectively tied to the cognitive structure and more resistant to change. In the following analysis, we control for this by examining attitude stability and age in various types of attitudes. Later we also analyze the prototypic symbolic disposition, political partisanship, as measured by the NES questions on party identification.

#### ATTITUDE OBJECT AND THE AGING-STABILITY RELATIONSHIP

Sears (1983, pp. 83–84) has developed a theory of symbolic politics, in which political attitudes can be placed along a continuum defined in terms of the degree of their ego-relatedness and resistance to change. Symbolic attitudes are those acquired relatively early in life, with strong affective components and little informational content. They are expected to be highly stable during adulthood. Political attitudes of a less symbolic character are presumed to be formed later in life and to be more likely to change in response to environmental pressures and events in the objective political world. In keeping with these theoretical ideas, Sears (1983) ordered attitude objects in terms of their expected degree of stability, from most to least symbolic, as follows: (1) political party identification and reactions to political candidates, (2) liberal/conservative ideological orientations, (3) attitudes toward social groups, (4) attitudes on racial policy issues, (5) attitudes on nonracial policy issues, and (6) attitudes concerning political efficacy and alienation.

Following such reasoning, one might suspect that the conclusions we have drawn in the aggregate analysis of attitudes may not generalize to all attitudinal objects. Such considerations may account for some variability in patterns of stability over the life course. Specifically, attitudes such as party identification, which refer to diffuse political symbols, are presumably more deeply rooted in the cognitive and affective structure of the individual—a more symbolic disposition. On the other hand, most of the attitudes assessed in the analysis above are considerably less symbolic. For example, attitudes toward some policy issues, which Sears argues are formed in adulthood, have lower levels of ego involvement and are more likely to change in response to persuasive arguments and political events. Similarly, attitudes expressing political efficacy and alienation may also be more likely to change over the life course because of the influences of variation in experiences in both biographical and historical time.

For purposes of this analysis we separated attitudes toward parties and candidates in Sears's (1983) first category, which resulted in our comparing seven categories. Table 2 presents averaged two-year stan-

TABLE 2

AVERAGE TWO-YEAR STABILITY COEFFICIENTS BY AGE AND ATTITUDE OBJECT: 1950S AND 1970S NES PANEL STUDIES

|                                      | POLICY<br>(8) |      | EFFICACY<br>(13) |      | GROUPS<br>(13) |      | RACE<br>(2) |      | PARTY<br>(6) |      | CANDIDATE<br>(5) |      | IDEOLOGY<br>(3) |      |
|--------------------------------------|---------------|------|------------------|------|----------------|------|-------------|------|--------------|------|------------------|------|-----------------|------|
|                                      | Mean          | SE   | Mean             | SE   | Mean           | SE   | Mean        | SE   | Mean         | SE   | Mean             | SE   | Mean            | SE   |
| Age group:                           |               |      |                  |      |                |      |             |      |              |      |                  |      |                 |      |
| 18-25 .....                          | .895          | .065 | .795             | .065 | .959           | .089 | .917        | .202 | .737         | .048 | .755             | .066 | .886            | .094 |
| 26-33 .....                          | .844          | .093 | .863             | .061 | .897           | .060 | .902        | .007 | .903         | .078 | .837             | .094 | 1.022           | .131 |
| 34-41 .....                          | .890          | .072 | .945             | .043 | .974           | .024 | .940        | .121 | .916         | .065 | .958             | .094 | .908            | .013 |
| 42-49 .....                          | 1.001         | .070 | .977             | .072 | .854           | .045 | .931        | .060 | .913         | .082 | .891             | .028 | .962            | .030 |
| 50-57 .....                          | .860          | .049 | .919             | .074 | .947           | .100 | .834        | .062 | .870         | .069 | .810             | .093 | .927            | .040 |
| 58-65 .....                          | .899          | .064 | .887             | .068 | 1.044          | .074 | .709        | .200 | .817         | .126 | .964             | .066 | 1.017           | .033 |
| 66-83 .....                          | 1.012         | .122 | .891             | .090 | .901           | .071 | 1.192       | .397 | .836         | .128 | .975             | .033 | .811            | .087 |
| All .....                            | .915          | .079 | .897             | .068 | .939           | .070 | .918        | .199 | .856         | .087 | .884             | .077 | .933            | .079 |
| Global test:                         |               |      |                  |      |                |      |             |      |              |      |                  |      |                 |      |
| Multivariate <i>F</i> -statistic ... | .912          |      | .659             |      | 1.098          |      | .715        |      | .937         |      | 1.255            |      | .814            |      |
| <i>df</i> .....                      | 12,96         |      | 12,166           |      | 12,166         |      | 12,12       |      | 12,68        |      | 12,54            |      | 12,26           |      |
| <i>P</i> .....                       | .538          |      | .789             |      | .365           |      | .715        |      | .516         |      | .272             |      | .635            |      |
| Youngest vs. all others:             |               |      |                  |      |                |      |             |      |              |      |                  |      |                 |      |
| Multivariate <i>F</i> -statistic ... | .121          |      | 1.423            |      | .274           |      | .315        |      | 1.209        |      | 2.222            |      | .482            |      |
| <i>df</i> .....                      | 2,48          |      | 2,83             |      | 2,83           |      | 2,6         |      | 2,34         |      | 2,27             |      | 2,13            |      |
| <i>P</i> .....                       | .886          |      | .247             |      | .761           |      | .741        |      | .311         |      | .128             |      | .628            |      |
| Oldest vs. all others:               |               |      |                  |      |                |      |             |      |              |      |                  |      |                 |      |
| Multivariate <i>F</i> -statistic ... | 1.018         |      | .331             |      | 2.753          |      | 3.576       |      | .253         |      | 1.283            |      | 2.526           |      |
| <i>df</i> .....                      | 2,48          |      | 2,83             |      | 2,83           |      | 2,6         |      | 2,34         |      | 2,27             |      | 2,13            |      |
| <i>P</i> .....                       | .369          |      | .719             |      | .070           |      | .095        |      | .778         |      | .294             |      | .118            |      |

NOTE.—Numbers in parentheses are the numbers of items in the categories.

dardized stability coefficients and their standard errors, comparable with those given in table 1, across seven age groups for each of these seven attitude-object categories.<sup>11</sup> In the table we also present the results of the multivariate *F*-tests of statistical significance of differences among these coefficients. In the lower part of table 2 we present a global test of whether there are any statistically significant differences among any and all age groups. The "youngest versus all others" test addresses whether the youngest age group's stability is significantly different from the stability of all the other age groups combined. And the "oldest versus all others" comparison does the same thing for the oldest age group's stability as compared with that of all the other age groups combined.

The results we show in this table make a remarkably powerful statement. It is clear from these several tests that there seems to be no systematic relation between age and attitude stability for any of these separate categories of attitude object. There are two categories for which the oldest age group appears to be marginally different from the others, but these results contradict each other. In the case of attitudes toward social groups (13 items) the oldest age groups seems to be less stable than others, whereas in the case of racial attitudes (two items) stability is highest in the oldest age group. There is some support for the symbolic-attitudes hypothesis with respect to the impressionable years, in that, for parties and candidates, the average stabilities for the youngest age groups are clearly the lowest. These differences, while clearly present, are not judged to be statistically significant. We performed a test for statistical interaction in the patterns depicted in table 2, which revealed no significant interaction between attitude object and age in affecting the level of attitude stability ( $F = .78, P = .91$ ).

#### AGING AND STABILITY—THE CASE OF PARTY IDENTIFICATION

The previous analyses refer only to cross-sectional stabilities and do not take into account the historical conditions that may affect attitude stability. In that analysis we pooled estimates across the two NES panel studies and examined differences in stabilities by age category. And because the age categories in a given panel were all observed on the same occasions, there is no possible distinction there between cohort effects and aging

<sup>11</sup> In some instances the average levels of stability for a particular age category exceed unity, the expected upper limit of such stability coefficients. However, such results can occur by chance, especially if the true level of stability is near unity. In all cases 1.0 is well within the standard errors for the estimated coefficients. In other instances these results may reflect the inapplicability of the simplex model employed here, but we have tried to exclude items for which we concluded this was true. Whatever the case, coefficients that exceed unity are interpreted as reflecting high levels of stability.

effects on stabilities. In other words, the stability estimates summarized above are essentially cross-sectional in nature, and they confound aging processes and cohort processes. A stronger test of our hypotheses would involve the analysis of cohort-specific stability levels at different ages.

Fortunately for our purposes, there was one question included in both the 1950s and 1970s NES panel studies—the seven-point party identification scale based on a standard series of questions in the election studies—for which we may derive intracohort comparisons over the two studies.<sup>12</sup> It has been used to measure two somewhat different concepts.<sup>13</sup> One is the directional component taken by itself; that is, does the person identify with one of the two major parties, or is he or she neutral or independent?<sup>14</sup> The second is the intensity of party loyalty or how strongly the person identifies with one of the two major parties, given that they identify with either.

The analysis of the stability of the intensity component is not straightforward. Following Converse (1976), we define intensity within the directional partition of Democrat/Republican, that is, the degree of identification with either party. We assessed intensity of party identification by using the absolute score of the party identification scale, equating 1 and 7, 2 and 6, and 3 and 5. In some cases this variable has uncertain meaning in the analysis of individual change, since a person might change from 3 to 5 in the course of time, or from 2 to 6, or even from 1 to 7, and all such changes would be registered as no change if Converse's measure of attitude intensity were used. While the use of such a variable is entirely appropriate in the cohort analysis of aggregate changes in the intensity of partisanship, it is not appropriate in the analysis of individual change. To remedy this minor problem, we simply let persons who

<sup>12</sup> The failure to replicate more of the 1950s questions in the 1970s is unfortunate because it limits the possibilities for the type of analysis we perform here. There was a second question about the respondent's attitude toward the federal government's providing employment for all citizens. Unfortunately, the 1956-1958-1960 series measured this attitude using a five-point "agree-disagree" scale, whereas the 1970s series assessed it using a longer question introduction and a seven-point rating scale. We examined the comparison of the results, but because of the question difference between these two series, the stability estimates were ambiguous. Still, for many political attitudes the relevant social issues change, and it is not possible to replicate questions over time (e.g., see Alwin et al. 1991).

<sup>13</sup> The variable is scored as follows: 1 = strong Democrat, 2 = weak Democrat, 3 = independent-leaning Democrat, 4 = independent, 5 = independent-leaning Republican, 6 = weak Republican, and 7 = strong Republican. "Don't know," "other," and "uncertain" responses were omitted from the analysis.

<sup>14</sup> The directional component is assessed by means of a binary variable representing "Democrat" and "leaning Democrat" on the one side and "Republican" and "leaning Republican" on the other. "Independents," "other," "don't know," and "uncertain" are omitted from the analyses of the stability of the directional component.



changed parties over time be absorbed into the zero point at the destination time.<sup>15</sup>

Table 3 presents standardized and unstandardized estimates of true attitude stability over two years of these three measures for all age categories in the 1950s and 1970s NES panels.<sup>16</sup> There are several ways to evaluate the differences among the stability coefficients in this table. When comparing different age groups or comparing the same cohorts over time, it is most appropriate to examine differences in unstandardized stability coefficients, although there is some utility in comparing the standardized coefficients as well (see Alwin 1988*b*). When comparing the processes as they may develop differently across aspects of the party-identification variable, specifically direction versus intensity, the standardized coefficients are somewhat more helpful, as they control for the differing units of measurement involved.<sup>17</sup>

These results indicate that the stability of party identification increases with age in both of the panel data sets and decreases in the oldest age group. In most comparisons, the youngest age group is significantly lower in the stability of both direction and intensity of party identification, and, in all cases, these levels of stability increase regularly from the youngest group through midlife. In a few comparisons there is a decline in the level of stability in old age, but this is primarily reflected in the measures of the intensity of party loyalty. These results contradict the "average" result, taken over all available attitude measures, that we show in table 1. That is, attitude stability in the directional (i.e., Democratic vs. Re-

<sup>15</sup> This actually happened in only a small number of cases, and we do not believe it detracts from our analysis of intensity in any significant way. We are grateful to an anonymous reviewer for suggesting this analysis.

<sup>16</sup> Table 3 presents estimates based on the Wiley and Wiley (1970) approach. The standardized results for this model are virtually identical with those obtained by the Heise (1969) approach, so we present only one set of results here. Thus, our results do not depend in any way on the possible weaknesses of the Heise model. We present both standardized and unstandardized results for the Wiley and Wiley model, so that all possible types of comparisons over age groups and time points may be entertained. We examined both the averaged two-year stabilities (presented in table 3) and four-year estimates. The same conclusions were reached with each set of numbers, although we present only the average two-year estimates here.

<sup>17</sup> We tested the statistical significance of the within-cohort differences in table 3 using a test of the significance of differences between two regression coefficients (see Cohen and Cohen 1983). Such tests use Fisher's *z*-distribution to indicate whether two independent regression coefficients are significantly different. If various comparisons of coefficients exceeded one-and-one-half the pooled standard error, they are so indicated as different in table 3. There are alternative strategies for comparing the coefficients across age groups, such as multiple-group analysis in LISREL. However, given the various types of comparisons we wish to make, this statistical test seemed more than warranted.

TABLE 3

AVERAGE TWO-YEAR STABILITY OF PARTY IDENTIFICATION, DIRECTION OF PARTY IDENTIFICATION, AND INTENSITY OF PARTY IDENTIFICATION:  
WILEY AND WILEY ESTIMATES

| COHORT<br>CATEGORY | AGE IN 1956 (n)         | AGE IN 1972 (n)         | UNSTANDARDIZED COEFFICIENT |                         |                  | STANDARDIZED COEFFICIENT |                         |           |
|--------------------|-------------------------|-------------------------|----------------------------|-------------------------|------------------|--------------------------|-------------------------|-----------|
|                    |                         |                         | Party Identification       | Democrat/<br>Republican | Intensity        | Party Identification     | Democrat/<br>Republican | Intensity |
|                    |                         |                         |                            |                         |                  |                          |                         |           |
| 1 . . . . .        |                         | 18-25 (199/147/199)     | .834<br>(.061)             | .838<br>(.056)          | .741<br>(.120)   | .816                     | .844                    | .686      |
| 2 . . . . .        |                         | 26-33 (221/151/221)     | 1.087*<br>(.074)           | .988*<br>(.043)         | 1.257*<br>(.223) | 1.051                    | .989                    | 1.103     |
| 3 . . . . .        | 18-25 (93/67/93)        | 34-41 (185/135/185)     | .834<br>(.078)             | .843<br>(.066)          | .647<br>(.125)   | .829                     | .867                    | .631      |
| 4 . . . . .        | 26-33 (223/174/223)     | 42-49 (196/151/196)     | .872<br>(.050)             | .891<br>(.047)          | .886*<br>(.097)  | .875                     | .897                    | .790      |
| 5 . . . . .        | 34-41 (234/188/234)     | 50-57 (163/139/163)     | .997*<br>(.043)            | .857<br>(.055)          | .930<br>(.090)   | .985                     | .971                    | .867      |
| 6 . . . . .        | 42-49 (181/149/181)     | 58-65 (137/104/137)     | 1.012<br>(.062)            | 1.009*<br>(.045)        | 1.116<br>(.206)  | 1.008                    | 1.007                   | .956      |
| 7 . . . . .        | 50-57 (132/106/132)     | 66-83 (157/134/157)     | .992<br>(.043)             | .961<br>(.023)          | 1.048<br>(.145)  | .979                     | .961                    | 1.010     |
| 8 . . . . .        | 58-65 (100/81/100)      |                         | 1.054<br>(.077)            | .987<br>(.053)          | .785<br>(.177)   | 1.014                    | .988                    | .752      |
| 9 . . . . .        | 66-83 (98/87/98)        |                         | .939*<br>(.044)            | .974<br>(.040)          | .638<br>(.109)   | .945                     | .974                    | .638      |
| All cohorts        | 18-83 (1,100/886/1,100) | 18-83 (1,270/971/1,270) | .966<br>(.020)             | .961<br>(.016)          | .935<br>(.052)   | .957                     | .966                    | .863      |

NOTE.—Standard errors are in parentheses.  
 \* Indicates coefficient is different from the coefficient above it ( $P < .10$ ).  
 † Indicates coefficient is different from the coefficient to its left ( $P < .10$ ).

publican) component grows with increasing age and does not appear to change in old age. By contrast, the stability of the attitude-intensity component of party identification seems to grow with age up to a point of relatively high persistence, and then its strength may decline in old age. And as this component becomes weaker, presumably there will be a greater change.

We can get an even better purchase on the attitude-stability relationship with aging by comparing stability estimates obtained for the same cohorts at different times. In order to do this, we have to assume period influences are not affecting these stabilities and that differences reflect processes of aging, net of cohort.<sup>18</sup> The results in table 3 indicate that in virtually all of the available comparisons, there is an increase in stability over the 16-year period studied, up until the age range 34–41, at which time the average two-year stabilities become generally high and remain constant thereafter. The major exception to this is that in the 65 and older age ranges, stability of the party-identification variable declines, presumably owing to the weakness of the intensity component. These patterns almost perfectly corroborate Sears's (1981, p. 199) speculation about there being a secondary period of increased susceptibility to attitude change in late adulthood. By contrast, for the directional component, once a high level of attitude stability is achieved, it seems to remain relatively persistent.<sup>19</sup>

If we take these results as valid with respect to inferences about aging and increases in the strength of partisan attitudes, that is, if we can infer from our estimates of magnitudes of true attitude change something more substantial about attitudes, namely their strength, then these results generally support the types of inferences made about life-cycle patterns of attitude strength made by Converse (1969, 1976).<sup>20</sup> The major difference involves the suggestion in the present set of data that the strength of the intensity component of attitudes may decline in old age.

<sup>18</sup> There is an obvious confounding of period with age in these analyses. Unfortunately, there are only two time periods represented in our data, each of which may have some unique influence on the patterns of stability we observe. However, given the types of life-cycle patterns predicted by our model, it is hard to imagine how this would have been produced by some kind of period effect. The average level of stability in the total sample at each point in time is absolutely constant—cf. .966 with .966.

<sup>19</sup> We may be venturing a bit far from the statistically significant differences in table 3. With respect to the declines in the stability of the intensity component in the oldest age groups, the key differences, while very apparent in the data, do not reach significance levels at even somewhat generous levels of significance.

<sup>20</sup> One may argue that these results generally support the conclusions of Converse (1976) but that the data on which Converse based his conclusions do not assess attitude strength but instead measure the tendency to express "extreme" attitudes. Growing attitude extremity with age, which Converse's results may reflect, is another matter.

### Cohort Effects versus Life-Cycle Effects on Stabilities

In order to clarify the trajectories of partisan stability over the life span, it is necessary to compare the age-constant stabilities of our central measures of partisanship (table 3). These comparisons reveal an amazing degree of similarity in the trajectories of attitude stability over the life course in the two sets of panel results, which suggests a life-cycle patterning in these processes. The major exception involves the level of stability for the 26–33 age group in the two panel studies—this group had virtually perfect stability in the 1972–76 panel data.

This exception may represent a unique cohort effect on attitude stability, reflected in its departure from the general pattern of partisan stability over the life course. It exists in the partisan attitudes of the cohort born 1939–46, who were 26–33 in the early 1970s. This cohort came of age during the 1960s, one of the most turbulent periods in recent political history, experiencing their 18th through 20th years between 1957 and 1966. It seems likely that this cohort may have entered the 1970s with highly crystallized political orientations, with attitude stabilities that, somewhat prematurely, achieved the highest possible level when they were 26–33 years old during the early 1970s.

Despite this important and interesting exception, our main results lead us to emphasize life-cycle factors in the development of sociopolitical attitudes over the life course. This emphasis, while recognizing the tendency throughout most of adult life for attitudes to become crystallized and to persist over time, also recognizes the differences in patterns of attitude stabilities at critical periods of the life cycle that are characterized by a higher-than-average number of changes in social life. The periods of youth and old age are both characterized by higher frequencies of major disturbances in one's social networks, living arrangements, family relationships, and work life (Glenn 1980; Wilensky 1981). Thus, we would attribute the higher levels of attitudinal instability to factors that vary within cohorts (see Alwin et al. [1991] for further discussion of this issue).

### DISCUSSION

We began this article by suggesting that young adulthood is a period of the greatest flexibility in attitudes and that attitudes continue to grow in strength with age, becoming increasingly fixed and resistant to change over biographic time. In past research the concept of attitude strength has been conceived of and empirically addressed in various ways. The analytic strategy we used in this investigation represents an improvement over previous approaches in many respects. First, we have defined the

strength of attitudes in terms of their openness or resistance to change over time and have developed these ideas within the framework of a statistical model for estimating the degree of over-time stability in attitudes. Second, we have used methods that have permitted us to estimate parameters of stability as a quantity separated from reliability of measurement. Specifically, our methods separated instability in the latent-attitude variable from unreliability of measurement—the two sources of attenuation in over-time covariance relationships. This is important in the comparison of stability levels across age groups, which have been known to differ in attitude-reporting reliability. Third, instead of using multiple-indicator structural-equation models, we have used single-indicator models. The validity of our conclusions thus does not depend on the assumption that a set of indicators is congeneric, that is, that a set of measures have perfectly correlated true scores (see Jöreskog 1978; Alwin and Jackson 1979). Fourth, our methods are an improvement on those used in past studies because we have looked at a variety of different types of sociopolitical orientations, including policy attitudes, racial attitudes, attitudes toward other social groups, measures of political efficacy, and the more ideological self-assessments obtained from measures of party identification, candidate preferences, and liberal-conservative ratings. Moreover, our analysis has permitted us to differentiate between the direction and intensity components of changes in partisan attitude strength over the life span. Finally, our analysis goes beyond previous research by comparing the same birth cohorts over time with respect to estimated stability of partisan orientations.

### Age and the Stability of Attitudes

Taken in the aggregate our measures provide little support for a conclusion that a systematic relationship exists between aging and attitude change. However, our results for the party-identification measures tell a different story. These results provide strong support for the impressionable-years hypothesis, which asserts that people are highly vulnerable to shifts in attitudes during young adulthood. Those results also provide strong support for the view that attitude stability increases with age. This increase appears to occur immediately following early adulthood, and attitude stability appears to remain at a constant, high level throughout the remainder of the life cycle. This finding that attitude stability increases with age is consistent with considerable other research that has explored the relation between political-attitude stability and age (Alwin et al. 1991; Glenn 1980; Jennings and Markus 1984; Jennings and Niemi 1981; Markus 1979; Sears 1981). The main focus of this previous research has been political party identification, a highly symbolic attitude. It is

therefore no surprise that these studies found evidence of increased attitude stability after young adulthood. Had they focused on less symbolic attitudes, as our evidence suggests, they would not have found such a relation. This evidence also parallels the findings of previous studies that have examined the relation of age to other aspects of political behavior. For example, Wolfinger and Rosenstone (1980, p. 48) found that the likelihood that a given individual will vote in a national election increases with age. Thus, it seems that attitudes and behavior that are central to politics increase in frequency and in crystallization with age.

Our results also have some relevance to Sears's (1983) claim that attitude stability declines in old age. In our multi-item analyses, we saw no clear and statistically significant evidence of such a decline. In our detailed analysis of party identification, the stability estimates we generated did show an age-related decline in the stability of the intensity component. While this decline was not statistically significant, it was clearly suggested in both the 1950s and 1970s panel data. However, when we tracked cohorts, the results revealed no statistically significant declines in stability in the oldest birth cohorts, and the evidence for a decline in stability is suggestive in only the 1970s panel. A conservative approach to these results would reject the claim that the stability of attitude intensity declines toward the end of the life cycle. An alternative view is that, while it is conceivable that such a decline does occur, we lack the statistical power to detect it.

#### Life-Cycle versus Cohort Interpretations

Our synthetic cohort analysis showing a cross-sectional relation between age and attitude stability was, while not statistically significant, certainly consistent with the impressionable-years hypothesis. This relationship is, however, subject to a number of alternative explanations. Most important, it is well-known that what, in cross-sectional analyses, appear to be relations with age could actually represent inherent differences between birth cohorts that persist throughout the life cycle. However, our detailed analysis of party identification provides a strong basis for ruling out this alternative explanation. In this analysis, we were able to track the same birth cohorts over a 16-year period to examine changes in their levels of attitude stability. And we found that the youngest birth cohorts did reveal increases in attitude stability, while there were no such increases for older birth cohorts. Because these increases in stability were clearly confined to only two of the five birth cohorts we tracked, they cannot be explained by period effects, which would be expected to appear in all birth cohorts. In this sense, our cross-sectional and longitudinal

results complement each other and together provide support for the aging-stability hypothesis.

As we noted, the literature on the relation of age to attitude strength has conceived of this construct in a variety of different ways, as indicated by attitude stability and as indicated by attitude intensity or extremity. Our analytic approach allowed us to go a step further: to examine the relationship of age to the stability of intensity. Converse's (1976) analysis of the intensity of party identification suggested that it increases precipitously early in adulthood and increases much more gradually throughout the remainder of the life cycle. This suggests that intensity grows more stable after early adulthood, a claim confirmed by our analysis of the intensity component of party identification. However, our estimates of the life-cycle stability of the intensity of partisan attitudes suggests that there may be greater amounts of change in attitude intensity in old age.

### Symbolic versus Nonsymbolic Orientations

Our finding that, for highly symbolic attitudes such as party identification, age is related to attitude stability but that this is not true for less symbolic attitudes is both reassuring and troubling for the symbolic-attitudes literature. Our result is reassuring in that it confirms that literature's claim that symbolic attitudes differ from nonsymbolic attitudes in their nature and functions. However, the symbolic-politics theory (Sears 1981, 1983) argues that symbolic attitudes are crystallized very early in life and remain highly stable thereafter, whereas nonsymbolic attitudes are highly flexible and susceptible to change throughout the life course. This would imply that symbolic attitudes should achieve a level of stability that exceeds that of other attitudes. However, this was not true for our data. Even at their highest stability levels, symbolic attitudes were no more stable than nonsymbolic attitudes. And, indeed, among the youngest age group in our analysis, the highly symbolic attitudes were less stable than all the other three categories of attitudes. This suggests that the differences between symbolic and nonsymbolic attitudes should probably be reconceived. However, we are reluctant to offer a reconceptualization until further solid evidence testing the various claims of this theory is available.

### Caveats about Methodology

We do not wish to suggest, though, that the results reported here are necessarily the last word on the relation of age to attitude stability. Separating test-retest covariance structures into components that are due to

stability and those that are due to unreliability is an inherently tricky business. We should therefore be cautious about the validity of our conclusions in this regard. Although our approach clearly represents a substantial improvement over previous efforts, the structural-equation model we used does make certain assumptions that may or may not be valid. For example, the model assumes that attitude change occurs according to a simplex process (Alwin 1988a), and some skepticism has been expressed about this assumption (Rogosa 1988). However, a careful review of our test-retest covariance matrices revealed that virtually all of them had a simplex structure; therefore, we are not particularly troubled by this assumption. The model also assumes that measurement-error variance remains constant across repeated interviews, which may or may not be the case. For example, a Socratic effect may produce a decrease in random-error variance across waves of a panel survey (Jagodzinski, Kühnel, and Schmidt 1987; but see Saris and van den Putte 1988). However, the error variances generated by our estimation method are essentially averages computed across the three interviews, which can be reasonably compared across age groups even if the assumption of constant-error variance is violated.

Although these assumptions do not seem problematic, the model does make other assumptions that may be untenable and that may complicate a clean separation of stability from unreliability. For example, the model assumes that there is no correlated measurement error across interviews, and violation of this assumption would lead to inappropriately low estimates of unreliability (although not inappropriate estimates of random measurement error; see Alwin 1989). We therefore await the development of more effective analytic techniques or the collections of multiwave-panel data sets that will eliminate the necessity of making these assumptions. In the meantime, though, the method we have used here seems clearly the best available for accomplishing our goals. Furthermore, the strongest results presented here are consistent with very strong bodies of theory on sociopolitical orientations and on the effects of aging. Thus, the validity of our conclusions seems likely to be substantial. Nonetheless, we look forward to future research in this area.

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## Commentary and Debate

To conserve space for the publication of original contributions to scholarship, the comments in this section must be limited to brief critiques. They are expected to address specific errors or flaws in articles and reviews published in the *AJS*. Comments on articles are not to exceed 1,500 words, those on reviews 750 words. Longer or less narrowly focused critiques should be submitted as articles. Authors of articles and reviews are invited to reply to comments, keeping their replies to the length of the specific comment. The *AJS* does not publish commenters' rebuttals to authors' replies. We reserve the right to reject inappropriate or excessively minor comments.

### CONCEPTUAL ISSUES IN MODELS OF SIBLING RESEMBLANCE: COMMENT ON HAUSER AND MOSSEL (1985) AND HAUSER (1988)

Hauser and Mossel (*AJS* 91 [November 1985]: 650–73) present a LISREL model of the educational and occupational attainments of a Wisconsin sample of primary male respondents and their brothers. Their model uses the terms of the LISREL program (Joreskog and Sorbom 1984) to specify an earlier analysis of covariance model for studying sibling resemblance (Hauser 1972). In a second paper, Hauser (*AJS* 93 [May 1988]: 1401–23) spells out the connection between the Hauser and Mossel model and this analysis of covariance (ANCOVA) approach. He also compares the Hauser and Mossel model (model 1) with another model commonly used in the sibling resemblance literature (model 2). Model 1 decomposes the relation between the men's occupation and education into three regressions: a between-family regression, a within-family regression for the primary respondent, and a within-family regression for the respondent's brother (Hauser, p. 1405). The between-family regression relates the mean occupation of the two brothers to their mean education (eq. [3]). Each within-family regression relates the mean deviate of the man's occupation to the mean deviate of his education (eq. [4]). Hauser presents model 2 as a reexpression of the terms in model 1 (eq. [6]). In this model

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the man's occupation depends on his education and the mean education of the man and his brother. Hauser's equation (6) shows that the slope of the man's occupation on his education in model 2 equals the slope of the within-family regression in model 1; the slope of the man's occupation on mean education in model 2 equals the *difference* between the within- and between-family slopes in model 1.

In the LISREL specification of these models, family factors replace the mean education and mean occupation of the brothers, and "disturbances" replace the mean deviates of the brothers' respective individual educational and occupational statuses. (I put the term disturbance in quotation marks because Hauser [p. 1407] rejects the interpretation of these terms as disturbances.) In the LISREL version of model 1, Hauser obtains the between-family slope by regressing the family-occupation factor on the family-education factor. He obtains each within-family slope by regressing the *disturbance* of the man's occupation on the *disturbance* of his education. In the LISREL specification of model 2, he gets the within-family slope by regressing the man's occupation on his education (instead of regressing the disturbances). He also specifies an "effect" of the family-education factor on the family-occupation factor, but he treats the resulting slope as an artifact of the difference between the between- and within-family regressions of model 1. Following his ANCOVA approach, he gets the between-family slope by regressing the man's occupation (rather than the family-occupation factor) on the family-education factor.

According to Hauser (p. 1421) models 1 and 2 are substantively equivalent when the within-family regressions are the same for the primary respondent and his brother. However, he prefers model 1 on two grounds: First, the regression of the man's occupation on the family-education factor could differ if, for example, the siblings were brother and sister or the primary respondent was always older than his brother. Hauser regards this possibility as problematic since it would mean that there are two between-family regressions. Second, the loadings of the men's education and occupation on the family factors will be unidentified (or nearly unidentified) when the slope of the family-occupation factor on the family-education factor is close to zero in the case of either model 1 or 2. Since, for the Wisconsin data, this is true of model 2 (rather than of model 1), Hauser encountered problems when he estimated these loadings using model 2.

In this comment, I suggest that the ANCOVA framework rules out alternative, plausible interpretations of models 1 and 2 and therefore could obscure the process that underlies the Wisconsin sibling data. My interpretation of the two models differs from Hauser's in two respects: First, I interpret the disturbances in the LISREL models as "true" dis-

turbances, instead of being just a device to specify the ANCOVA framework as a LISREL model. Second, I regard the slope of the family-occupation factor on the family-education factor as an estimate of the effect of the latter on the former in *both* models. As I will argue later, the advantage of this interpretation is that the logic problem Hauser attributes to model 2 disappears.

These issues of interpretation are important because models 1 and 2 differ sharply in how they picture the role of the man's family and his education in the occupational attainment process. Moreover, I will argue that model 2 presents the more plausible picture. Hauser's point about the near unidentifiability of this model is valid, but, as he points out, when the models are not substantively equivalent, "the choice between them should rest on theoretical or empirical grounds" (p. 1421). I prefer model 2 over model 1 because in model 1 the man's education has no effect on his occupation. Instead, the relation between these two variables is produced by the effect of the education disturbance on the occupation disturbance and by the effect of the family-education factor on the family-occupation factor. In contrast, model 2 presents the education-occupation correlation as due to the effect of the man's education on his occupation.

To develop these points further, I present two LISREL models that are diagramed in figures 1 and 2 below. To distinguish Hauser's models from mine, I use arabic numbers to index Hauser's two models and roman numerals to index my two models. I present the relevant parameter estimates for these two models in table 1.<sup>1</sup> I use the first model (model I) to present the relations between the educational and occupational statuses of the primary respondents and their brothers in Hauser's data. These relations raise questions about how to model the sibling-resemblance process. The second model (model II) represents a version of Hauser's second LISREL model (model 2). In my description of this model, I also discuss what I believe are conceptual problems with Hauser and Mossel's model (Hauser's model 1). Although I prefer my version of Hauser's model 2 to both of his models, it leaves unanswered the question of how to interpret the positive relation between the occupational status of the primary respondent and that of his brother. Consequently, I discuss the possibility of interpreting this relationship by specifying reciprocal effects between these two statuses.

<sup>1</sup> The diagrams in figures 1 and 2 are incomplete since they omit the measurement portion of the models that Hauser (p. 1403) and Hauser and Mossel (p. 667) describe. The measurement portion of my models differs slightly from theirs (Gillespie 1990), and, therefore, I get slightly different estimates of the parameters. However, these differences have no bearing on my comments.

TABLE 1  
PARAMETER ESTIMATES AND GOODNESS-OF-FIT STATISTICS FOR TWO MODELS OF  
SIBLING RESEMBLANCE

| PARAMETER ESTIMATE           | MODEL |       |
|------------------------------|-------|-------|
|                              | I     | II    |
| Effect:                      |       |       |
| R's ed on R's occ .....      | .719  | .719  |
| B's ed on B's occ .....      | .719  | .719  |
| Variance:                    |       |       |
| R's ed .....                 | 4.155 | ...   |
| B's ed .....                 | 4.439 | ...   |
| Fam-ed .....                 | ...   | 1.874 |
| u(R-ed) .....                | ...   | 2.281 |
| u(B-ed) .....                | ...   | 2.565 |
| u(R-occ) .....               | 2.797 | 2.797 |
| u(B-occ) .....               | 2.839 | 2.839 |
| Covariance:                  |       |       |
| R's ed with B's ed .....     | 1.874 | ...   |
| u(R-occ) with u(B-occ) ..... | .828  | .828  |

To provide a clear picture of these models, I use abbreviations rather than LISREL notations to label the variables. The abbreviations "R's ed," "B's ed," "R's occ," and "B's occ" stand for the primary respondent's schooling, the brother's schooling, the respondent's occupation, and the brother's occupation, respectively. The letter *u* with the appropriate term appended denotes the disturbances associated with these variables.

#### Model I

The model in figure 1 contains no family factors, just R's ed, B's ed, R's occ, B's occ, and the disturbances for each man's occupation, u(R-occ) and u(B-occ). When they are constrained to be equal across the two brothers, the slopes of occupation on education are .719. In addition, R's ed covaries with B's ed, and the disturbance for R's occ covaries with the disturbance for B's occ. (The covariances are 1.874 and .828, respectively.) The likelihood chi-square for the model is 25.87, which for 26 degrees of freedom represents a good fit to the data ( $P = .471$ ). Note that R's ed has no effect on B's occ, and B's ed has no effect on R's occ. Adding these effects to the model yields small, statistically insignificant, negative slopes. Setting these effects equal to zero, then, is consistent with the data.

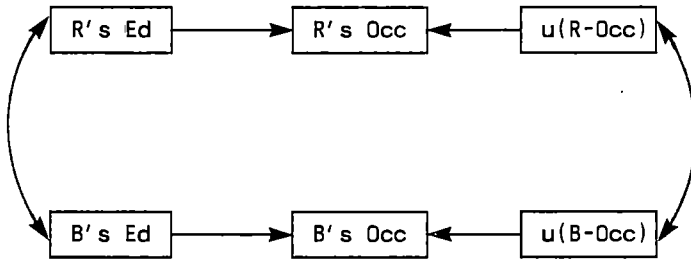


FIG. 1.—Model I: covariance between brothers' education and covariance between residuals of brothers' occupations.

The absence of the cross effects of one man's education on his brother's occupation makes it clear why Hauser and Mossel (p. 669) are able to argue that studies of occupational attainment that omit information on the education and occupation of siblings still provide unbiased estimates of the respondent's education on his occupation. Although both education and occupation correlate across brothers, the absence of "cross-sibling" effects of education on occupation means that no control for the brother's education is necessary in order to obtain an unbiased estimate of the effect of the respondent's education on his own occupation. These results raise a number of substantive questions: Why do the respondent's and brother's education covary? Why do the disturbances for the respondent's and brother's occupations covary? Finally, does the absence of the cross effects of one man's education on his brother's occupation make substantive sense?

## Model II

The model in figure 2 provides an answer to the first question by specifying a family-education (fam-ed) factor to account for the covariance between education of the two men. To keep the discussion simple, I will interpret fam-ed as part of the family's culture, the set of assumptions shared by the family members concerning the desired level of schooling for their children.<sup>2</sup>

<sup>2</sup> The idea of a family culture is rooted in Berger and Kellner's (1964) seminal essay on marriage as an organizational arena for the social construction of reality. This conception has found considerable currency in the family-systems literature (e.g., Reiss 1981), and it appears to underlie Thomson and Williams's (1982) specification-of-a-couple factor to explain the covariance between husbands' and wives' respective expectations about the birth of an additional child in a sample of couples. As Hauser and Mossel (p. 651) note, one also can interpret this family factor as the common genetic heritage of the two brothers.



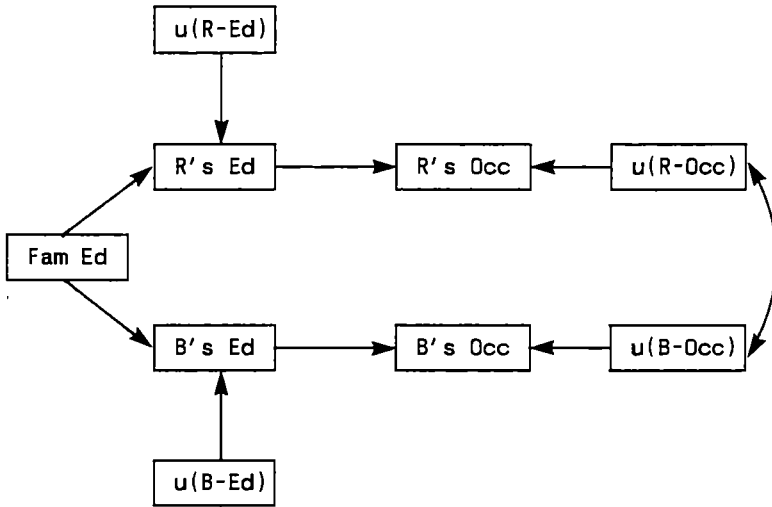


FIG. 2.—Model II: family-education factor and covariance between residuals of brothers' occupations.

Adding a fam-ed factor changes the model only in apparently trivial respects. Instead of the covariance between R's ed and B's ed, there is a latent variable, fam-ed, which is measured by R's ed and B's ed.<sup>3</sup> Because fam-ed does not completely determine each brother's education, we need disturbances for R's ed and B's ed:  $u(R-ed)$  and  $u(B-ed)$ , respectively.<sup>4</sup> Otherwise, the model is unchanged. The effect of each man's education on his occupation stays the same (.719), and the goodness-of-fit measures are the same ( $\chi^2 = 25.87$ ;  $df = 26$ ). We also could add a family-occupation factor to the model in place of the covariance between  $u(R-occ)$  and  $u(B-occ)$  without changing either the estimates of the effect of the man's education on his occupation or the fit of the model to the data. I do not do this for reasons discussed below, but the result would be a model that is formally equivalent to Hauser's model 2.

The substantively interesting feature of model II is that the absence of cross-sibling effects of education on occupation in model I means that the family-education factor has no direct effect on either man's occupation.

<sup>3</sup> Following Hauser and Mossel (pp. 662–63) and Hauser (pp. 1407–8), I set the loadings of R's ed and B's ed on fam-ed at one.

<sup>4</sup> From table 1, we see that the variance of the latent variable fam-ed in model II equals the covariance between R's ed and B's ed in model I and that the variances of  $u(R-ed)$  and  $u(B-ed)$  equal the difference between this covariance and the respective variances for R's ed and B's ed in model I.

Instead, the effects are indirect via each man's education. With respect to Hauser's model 2, this absence means that the family-education factor has no direct effect on the family-occupation factor (pp. 1411–13). Also, this absence means that an attempt to broaden the interpretation of fam-ed by specifying a family-achievement factor that affects both the education and occupation variables will yield small nonsignificant loadings of each man's occupation on this factor. Again, but now in terms of model II, we see why omission of the fam-ed factor in studies of occupational attainment does not bias estimates of the effect of the man's education on his occupation. Since fam-ed has no independent effect on occupation, there is no need to control for it.

### Conceptual Advantages of Model II

Even though the effect of introducing u(R-ed) and u(B-ed) into the model is apparently benign, my criticism of Hauser and Mossel's model (Hauser's model 1) rests on the interpretation of these terms. Hauser and Mossel also treat these terms as disturbances, but, in his later paper, Hauser rejects this interpretation. Drawing on his ANCOVA formulation, he refers to these terms as "within-family components" that, although they "behave something like disturbances, . . . are neither errors in variables nor errors in equations; they pertain to true deviations from family levels of status variables" (p. 1407). However, this definition does nothing more than restate the formal function of these terms as disturbances in the LISREL models. It fails to answer the question of how to interpret them substantively.

The difference between the two models is profound when we interpret these terms as disturbances—specifically, as errors in equations that represent the individual causes of the man's schooling that have been omitted from the model. Hauser and Mossel's model (Hauser's model 1) treats the correlation between the man's education and his occupation as spurious by eliminating the paths from each man's education to his occupation. The education-occupation relation occurs, first, because of the effect of the omitted causes of the man's education on the omitted causes of his occupation and, second, because of the effect of the fam-ed factor on the family-occupation factor.

In using the ANCOVA framework to argue for the substantive equivalence of models 1 and 2, Hauser begs the question of the fundamental nature of this framework. While Hauser appeals to the authority of demography and economics in justifying this framework (p. 1421), Hauser and Mossel suggest that LISREL models "should supplant the analysis of covariance framework as the standard model for analyses of contextual effects" (p. 654). One advantage of moving to LISREL is to examine

interpretations of the data that are not wedded to the ANCOVA framework. Hauser also uses the authority of demography and economics to reject the claim of other readers that "there is something needlessly abstract about the deviation of an individual's educational attainment or occupational status from that typical of his or her family" (p. 1421). Yet the idea of a man's using the mean deviation of his schooling to apply for a job is surely a curious one. In contrast to model 1, Hauser's model 2 has the advantage of including a family factor (or factors) without sacrificing the specification that the man's educational attainment affects his occupational attainment.

Replacing the ANCOVA framework with LISREL or, more generally, latent-variable models also solves the logic problem that Hauser attributes to model 2. Hauser is troubled by the possibility that the slope of the man's occupation on the fam-ed factor could differ between the primary respondent and his sibling. However, this difference is a problem only when viewed from the perspective of the ANCOVA framework. As figure 2 shows, the fam-ed factor affects each man's occupation indirectly via his education. To the extent that either the effect of the fam-ed factor on the man's education or the effect of the man's education on his occupation differs between primary and secondary respondents, the slope of occupation on the fam-ed factor will differ. When I assign no special meaning to these two slopes, the fact that they could differ presents no problem.<sup>5</sup>

### Interpreting the Relation between the Brothers' Occupations

Model II does not answer the question of why the brothers' occupations continue to covary after the effects of education are controlled for. One way of dealing with this question is to posit a family-occupation factor in addition to the fam-ed factor. Without ruling out this possibility altogether, this choice seems problematic on two grounds. First, from a family-culture perspective, a fam-ed factor makes more sense than a family-occupation factor. In developing their particular conception of family culture, Reiss and Oliveri (1983, p. 81) write that a family paradigm is a "set of enduring assumptions about the social world shared by

<sup>5</sup> Hauser's model 2 also specifies an effect of the fam-ed factor on a family-occupation factor. It is unclear why he does not interpret this effect as representing the concept that motivates his specification of the between-family regression in the ANCOVA framework. One advantage of this interpretation is that the effect will have only one value, even if either the loading of the man's education on the fam-ed factor or the effect of the man's education on his occupation differs. Of course, this question is moot with respect to my version of his model 2 (model II) since I do not specify a family-occupation factor.

all family members." Because of the long-term interaction between the family and educational institutions, the emergence of shared expectations about the children's level of schooling seems likely. To the extent that interaction between the family and the workplace is lacking, the development of shared expectations about the children's occupational choice seems less likely. Second, regardless of whether a family-occupation factor exists, the specification that the fam-ed factor *causes* the family-occupation factor confuses the system level of the family with the individual level. Because people typically leave school and then get a job, it makes sense to say that schooling affects occupation at the level of the individual. However, it is not clear that this same causal sequence would occur at the macro level of the family system.<sup>6</sup>

Another explanation for the covariance between the brother's occupations is the possibility of mutual influence or reciprocal causation. The rationale for this specification is the possibility that brothers act as role models for each other; the achievement of one facilitates the achievement of the other. Adding reciprocal effects of the two brothers' occupations on each other raises a problem, however. Without further restrictions on the model, the estimates of the reciprocal effects will be trivial. This problem is signaled by the absence of cross-sibling effects in model I since these cross-sibling effects correspond to the reduced-form coefficients (Duncan 1975).

A straightforward solution to this problem is to set the covariance between the occupation disturbances,  $u(R-occ)$  and  $u(B-occ)$ , equal to zero. This solution is unsatisfactory, however, because it reduces the fit of the model to the data. Another solution is to specify effects of the education disturbances,  $u(R-ed)$  and  $u(B-ed)$ , on the respective occupations. John Fox and I have shown that downwardly biased estimates of the reciprocal paths produce upwardly biased estimates of the covariance between the disturbances when a model omits a set of (relatively) independent common causes of the two sets of instrumental and endogenous variables (Gillespie and Fox 1980, pp. 290-91, 289-99).<sup>7</sup> Since Hauser omits causes of each man's schooling and occupation (p. 1408), the estimate of the cross-sibling effects in models I and II (and, therefore, the estimate of reciprocal effects as well) could be downwardly biased, while the estimate of the covariance between the occupation disturbances could

<sup>6</sup> The same criticism obtains if one interprets the family factor as representing the brothers' shared genetic background. Why should the structure of the gene that contributes to the individual's educational attainment cause the gene that contributes to his occupational attainment?

<sup>7</sup> Specifically, we show that these results occur when the correlation between the omitted common causes is less than the correlation between the instrumental variables.

be upwardly biased. Because the effects of the education disturbances on occupation are unidentified, the best one can do in respecifying the model is to use sensitivity analyses that try differing values of these effects.<sup>8</sup>

## Conclusion

Hauser has argued that his models 1 and 2 are equivalent because the parameters of one model can be expressed in terms of the parameters of the other model, and the parameters of both can be expressed in terms of the parameters of an ANCOVA model of sibling resemblance. However, his argument begs the question as to which of the models is more "fundamental" in the sense that Goldberger (1973) uses the term. For example, the slope of  $y$  on  $x$  in a simple regression can be written in terms of the slope of  $x$  on  $y$ . Despite this equivalence, few would argue, as Hauser does in his comparison of models 1 and 2, that the choice of models is one of convenience and has no conceptual or theoretical consequences.

Models I and II are also equivalent in this sense. Yet they say different things about the process that generated the Wisconsin sibling data. Model I is the more agnostic. It specifies no family factor but does not rule them out, either. It simply takes as given the covariances between the brothers' education and between the disturbances of the brothers' occupations. Model II specifies a fam-ed factor but remains agnostic to the covariance between the residuals for the brothers' occupations. I raise the possibility of explaining this covariance by adding, first, the reciprocal effects of the brothers' occupations on each other and, second, the effects of the education disturbance on each man's occupation. Since the effects of the education disturbances on occupation are unidentified, I do not present parameter estimates for these models.

I prefer model II to Hauser's model 1 as a starting point for the development of more elaborate models because model II makes more sense. However, I hope that this comment shows how possible, plausible models can emerge once we abandon the ANCOVA framework. Finally, I find the specification of a family factor a useful one. However, we need to think more about the meaning of such factors and to develop more direct

<sup>8</sup> Using plausible values for these effects, I was able to obtain a model that fits the data as well as models I and II, that yields positive estimates of the reciprocal effects of R-occ and B-occ on each other, and that completely accounts for the covariance between the occupation disturbances (Gillespie 1990). In addition to the problems raised above, however, the specification of these reciprocal effects also raises conceptual and substantive problems.

measures of them. I hope that the articles by Hauser and Mossel and by Hauser and this comment move us closer to this goal.

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## SIMPLE MODELS OF SIBLING RESEMBLANCE: REPLY TO GILLESPIE<sup>1</sup>

Michael W. Gillespie is right about two things. First, his models fit the data analyzed by Hauser and Mossel in 1985 and by Hauser in 1988. Second, under some (but not all) conditions, one must choose whether to use cross-sibling, cross-variable covariances to identify distinct within- and between-family regressions, cross-lagged effects, or reciprocal effects between sibling outcomes (Hauser and Mossel 1987). If the choice is

<sup>1</sup> I thank Michael Gillespie for submitting his original comment to this journal. It prompted me to revise and submit an early version of Hauser (1988) for publication.

among those specifications, that choice depends on theoretical assumptions.

Beyond that, Gillespie's comment makes no methodological or substantive contribution. I shall not respond at length: my 1988 *AJS* article includes revisions based on an earlier draft of a comment by Gillespie that anticipate most of his commentary, and I see no reason to repeat that material. That is, most of my reply to Gillespie is in that article, and I recommend it to those who are interested.

The greatest single flaw in Gillespie's commentary is that he does not understand the purposes of the models that he has criticized. The purposes were not to fit a particular set of data—although the models succeeded in that—but to develop simple models that specify sibling resemblance fully in minimal data and to elucidate the effects of measurement error in those models. The significance of the work, if any, is not in fitting particular data but in developing models that can be used to specify sibling resemblance with minimal data. Gillespie's two models (I and II) fitted the data for 518 brother pairs in the Wisconsin Longitudinal Study (WLS) that were analyzed by Hauser and Mossel and by Hauser only because those data show no significant familial sources of omitted-variable bias in the regressions of occupational status on educational attainment (after correction for measurement error). Neither of Gillespie's models would fit any body of data in which there were significant familial sources of omitted-variable bias in the regression of occupational status on educational attainment, but several such examples are easy to find (see Hauser 1984; 1988, pp. 1418–20).<sup>2</sup> Moreover, the parameters of Gillespie's models do not fully specify sibling resemblance in multiple outcomes nor do they contrast within- and between-family regressions or correlations. For example, even where within- and between-family regressions are homogeneous, as in the data for the 518 WLS brother pairs, the Hauser-Mossel model yields a direct comparison between the correlations of educational attainment and occupational status within and between families (pp. 666–68); those correlations play no role in Gillespie's models.

Other major flaws in Gillespie's commentary follow from assertions that can easily be falsified by methodological analysis or that should be subject to empirical investigation. An example of the former is his statement that  $\gamma_{11}^*$  in my model 2 (p. 1402) specifies the effect of the family education factor on the family occupation factor; in the article I demonstrate algebraically that it specifies the arithmetic difference of the slopes

<sup>2</sup> However, the evidence of bias in these data is weakened or eliminated by plausible specifications of measurement error in educational attainment.

of the between-family and within-family regressions (pp. 1408–11).<sup>3</sup> Algebra dominates assertion as a method of proof.

Gillespie's insistence that within-family components of educational attainment and occupational status are "disturbances," rather than substantive variables, is similarly defective. The substantive significance of individual and family constructs is defined by the part they play in the models in relation to other constructs, not by labels that Gillespie chooses to place on them.

Another of Gillespie's assertions, that "in model 1 the man's education has no effect on his occupation," is incredible. In that model, a man's education has two parts, a family effect and an individual effect, and those two parts affect the corresponding parts of his occupational status.

One of the latter flaws is Gillespie's statement that the family factor in his model II should be interpreted as "family culture." This is a throwback to the beginning of Blau and Duncan's (1967, pp. 316–20) original discussion of family effects on occupational status, where they took a man's brother's education as a proxy for "family climate." The whole point of the current development of sibling models is to move away from empty global interpretations of family resemblance and to specify the empirical content of common family factors. In Hauser and Mossel and in Hauser, but not in Gillespie's rudimentary models, the content of familial occupational status (but not that of familial educational attainment) is specified by the model; that is, skeletal models of sibling resemblance specify the content of endogenous, but not of exogenous, common family factors. This is not an inherent limitation of the models. Hauser and Wong (1989) specified that mother's and father's educational attainment and father's occupational status are sources of a common family educational factor. Hauser and Sewell (1986) elaborated the Hauser-Mossel model to specify that father's educational attainment, father's occupational status, and number of siblings are predetermined causes of common family factors in ability, educational attainment, occupational status, and earnings. Empirical research dominates assertion as a method of investigation.

Gillespie's commentary also misses other relevant prior work and introduces other errors. For example, Hauser and Mossel (1987, pp. 130–

<sup>3</sup> Gillespie's error lies in his failure to see that the effect of the family education factor (in model 2) by way of respondent's (or brother's) educational attainment is a component of the between-family regression (see Hauser 1988, pp. 1408–11, 1421). That is,  $\gamma_{11}^*$  is a direct effect, not a total effect. Contrary to Gillespie's claim, model 2 implies the existence of two distinct, between-family regressions whenever the slopes of the regressions for the two siblings are heterogeneous, and this holds whether or not there is family bias in the regression of occupational status on education. Also, contrary to Gillespie, I do not say that  $\gamma_{11}^*$  is an artifact.



32) elaborate their models to include several alternative specifications of reciprocal influence between the occupational statuses of brothers in the data analyzed in the earlier Hauser and Mossel article, and Hauser and Wong (1989) develop a simultaneous equation model of brother's educational attainments. Furthermore, Gillespie erroneously identifies the Hauser-Mossel model as a LISREL specification of the ANCOVA model in Hauser (1972). My 1972 model is a fixed-effects model, and the Hauser-Mossel model specifies random effects. The two models are analogues, but they are not the same.

In my opinion, readers should not rely on Gillespie's commentary for a description of the models in Hauser and Mossel (1988) or in Hauser (1985) or for an analysis of the properties of those or similar models. Nor do I think that it offers new ideas that will prove useful in future research on the effects of families in the stratification process.

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## Book Reviews

*Communities of Discourse: Ideology and Social Structure in the Reformation, the Enlightenment, and European Socialism.* By Robert Wuthnow. Cambridge, Mass.: Harvard University Press, 1989. Pp. viii + 739. \$49.50.

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It is impossible not to admire Robert Wuthnow's massive and beautifully written book. An integrated comparative analysis of the fate of the Reformation in nine areas of Europe (the German principalities, the Swiss cantons, the Low Countries, Denmark, Sweden, England, eastern Europe, France, and Spain), of the success or failure of the Enlightenment in 10 countries (France, England, Scotland, Prussia, the Dutch Republic, Sweden, Austria, Russia, and Spain), and of the development of socialism during the half-century before 1914 also in 10 countries (Germany, France, Britain, Sweden, Denmark, Norway, Belgium, the Netherlands, Spain, and Italy), *Communities of Discourse* has a sweep that is without parallel among modern studies in the sociology of culture. And that sweep is matched by erudition—for, while Wuthnow builds his study with evidence from existing secondary sources, he has eschewed the familiar practice of coasting along with a few standard historical overviews. At least in the instances where I am able to judge, Wuthnow knows not only the standard overviews and other general historical works, but a tremendous number of more specialized monographs and articles as well. He has definitely not taken the quick path that is a snare for the historical sociologist.

The book sets an ambitious agenda that has several parts. It critiques two "strands of thinking . . . prominent in the social science literature on cultural change": the "cultural adaptation" perspective, associated with Durkheim and Parsons, which sees "new patterns of culture becoming prominent as modes of revolving [problems generated by] broad changes in social organization"; and the "class legitimation" perspective, found in both Marx and Weber, which holds that "new ideologies [arise to meet the] requirements for legitimation [that appear] as a new social class becomes more powerful" (pp. 517, 518, 523). Against the limitations that mark both approaches, Wuthnow proposes an alternative view, which "emphasizes both the tangible social contexts in which culture is produced and the internal structures of the resulting cultural products" (p. 557). It is to exemplify this alternative that he undertakes his

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examination of the Reformation, the Enlightenment, and pre-World War I socialism. In so doing, he also seeks to challenge the claim that these episodes emerged in a direct way from economic developments associated with the rise of capitalism.

Wuthnow carries through with some items on this agenda more successfully than with others. The critique of cultural adaptation and class legitimation theories is excellent on its own terms—although by engaging only these theories and neglecting numerous other approaches to cultural change that emerged between the time of the classical authors and the present, Wuthnow wrongly projects the view that sociology is still in the grips of “the classical legacy” and that the only real alternative is the one he now offers (drawing selectively on some lines of contemporary work). As for the alternative itself, Wuthnow’s outline of this is a subtle and compelling proposal for “a multifactoral perspective” intended to break from the “unilineal or deterministic” assumptions of the older theories and their focus on “subjective features of culture” (meanings and motivations), and to attend instead to “specific historical conjunctures,” to “intervening social processes,” and to “observable features of culture”—meaning by the latter “discourse and other symbolic-expressive acts and practices,” including “speech acts, enunciative fields, symbolic codes, cultural production, culture in action, and the institutionalization of cultural products” (pp. 557, 535, 527, 528, 39, 538–39).

One finds, however, that Wuthnow’s historical analysis of socialism, the Enlightenment, and the Reformation manages to bring only a part of this appealingly worded proposal to life. In place of the announced “multifactoral perspective,” for example, what his account of the three episodes actually offers is a more explicitly “state-centered” approach to cultural change—though this alone establishes his book’s importance for future scholarship. According to Wuthnow, the Reformation, the Enlightenment, and prewar socialism all flourished in social environments experiencing economic growth. The effect of economic conditions on the ideological sphere was not a direct one, however, it was “mediated by institutional contexts,” especially by state structures. What economic growth produced were “resources” that created “opportunities” for cultural innovation, in particular by “facilitat[ing] the growth of state agencies . . . sufficiently differentiated from more established segments of the ruling elite to provide [various forms of encouragement for] ideological movements” and “the space in which new ideologies could gain support” (pp. 8–9, 574, 566). The Reformation thus succeeded in areas where “the commercial revolution [created] resources that cities and states could deploy . . . to gain autonomy from the powerful landed interests” that upheld the old religious order; this autonomy allowed “central governing agencies . . . to function positively as part of the institutional context in which innovative religious discourse could be produced and disseminated” (p. 47). Likewise, the mercantilist economic arrangements of the 18th century supported, in some European countries,

"an enlarged state bureaucratic apparatus and a heterarchic division of authority within this apparatus. Growth in the central bureaucracy . . . provided resources—patronage, academies and salons, printing facilities, . . . a concentrated audience—for Enlightenment writers, [while the heterarchic authority structure gave them] the relative autonomy they needed to produce [their] reflections" (pp. 178–79). Finally, rapid industrialization in the 19th century increased the ranks of the proletariat; but, in general, socialist ideologies only "became more fully institutionalized in party politics when [economic change] was accompanied by the presence of a conservative aristocratic regime that weakened the liberal bourgeoisie's capacity to forge an alliance with the proletariat, [thus giving] socialist parties . . . freer rein in mobilizing the working class" (p. 446).

Broadly speaking, Wuthnow's argument here is a convincing one. The state-centered analysis proves, moreover, an extremely powerful vehicle for tying together three very different cultural developments in different places and times—and this while offering an interpretation not inconsistent (so far as I can tell) with that of a number of historians. It should be pointed out, nevertheless, that Wuthnow's analysis is generally more effective in attacking the claim (a currently straw man?) that the three cultural episodes were direct results of the emergence of the capitalist economy than it is in justifying his own reduction of "mediating" or "intervening social processes" to state-related factors. Granting the role of state factors, one must still question Wuthnow's tendency to register *other* institutional contexts—schools, universities, academies, political parties, and so on—only insofar as they manifest the agency of the state, as well as his tendency to regard the mediating processes of cultural production as adequately identified once the state is on the scene. Granting, too, the virtues of explanatory parsimony, it is difficult to accept Wuthnow's virtual neglect of certain decisive historical factors that are off center from the theoretical concerns of the book. For instance, despite the importance of religion as the intellectual and institutional force against which the Enlightenment took shape and defined itself, Wuthnow's 200 pages on the Enlightenment offer almost nothing on the movement's religious foundations.

There is a related aspect of Wuthnow's historical explanation that deserves comment. This involves an issue that he actually identifies in his own critique of previous sociological work. The main independent variables in Wuthnow's study, economic conditions and state structures, are, obviously, highly complex phenomena with many different components and measures. The same is true of the dependent variable, cultural change; for Wuthnow is concerned at once with the "production" of new ideologies, with the "selection" of some of these over others, and with their subsequent "institutionalization"; each of these terms refers to a complicated process that may be tracked in different ways. A stringent test for his position on the relation between economy, state, and ideology would involve a discussion of the different indicators, a specification of which are most appropriate for a given historical period, and then an

analysis of the period's patterns that tries to hold to these same indicators. In *Communities of Discourse* there is an unfortunate tendency to settle for a much easier test: that is, to allow the analysis of a given period to seize (without justification or warning) now on this, now upon that, now on another indicator of economic growth, or state activity, or cultural innovation, so that the overall thesis of the book is upheld—but via considerable shifting about. This looseness in the argument is compounded by Wuthnow's flexible orientation toward historical chronology. By way of accounting for the Scottish Enlightenment, for example, he maintains: "the [Scottish] economy and state bureaucracy expanded dramatically over the course of the eighteenth century"; this provided the resources that "made it possible for universities to expand," for a "growth of patronage [and of new] avenues of employment" to occur, and so on (pp. 263, 257, 256). But this type of explanation glosses over troublesome specifics of the actual historical sequence: that what are often regarded as the major transformative periods in the Scottish economy came in the 17th century, well before the Enlightenment, and then again in the *late* 18th century, just when the Enlightenment was ending; that university expansion was at best extremely modest until the Enlightenment's dying days; and that increases in state patronage and employment were still insufficient during the Enlightenment even to dent the vast oversupply of unemployed intellectuals.

A more serious gap in Wuthnow's book is its treatment of the content of the movements examined, especially the Reformation and the Enlightenment. The book, to be sure, compares rather favorably here with work by other sociologists and even some social historians; but it still offers relatively little to readers seeking to learn about the ideational substance of these cultural developments, developments Wuthnow's analysis proceeds to explain well before it even defines their cultural characteristics. When it does come to these characteristics, moreover, the emphasis falls much more on matters of form—on the interesting issue, for example, of the literary genres favored by each movement—than on the messages contained in the forms. Wuthnow's apparent rationale for this is that "what characterized the [works of each] period more than any uniformity of orientation was their sheer diversity" (p. 193). But this fact does not minimize the importance of making clear the *range* of substantive diversity that constituted each movement; for unless this is done it is impossible to differentiate the Reformation or the Enlightenment from earlier or other contemporaneous ideological expressions—and thus impossible to speak of cultural change to begin with. In short, while the theoretical sections of the book accent "discourse," "speech acts," and the like, and see these as embodied in texts, the historical sections provide little textual analysis. In hundreds of references in the Enlightenment chapters, I could not find a single citation to any work by any of the Enlightenment's major representatives; and where Wuthnow does briefly enter into content (to offer some very stimulating observations on the "binary categories" and types of "figural action" found in the three cultural

episodes), he generally proceeds with no textual evidence at all. Where he adverts to ideas that figured significantly in the movements—for example, authority, freedom, nature, reason, individual rights—he writes as if these are self-explanatory, giving no historical sense of how these notions were understood in the “communities of discourse” where they were used. Despite the book’s title, these are not its subject.

This handling of the content factor would be of lesser concern were Wuthnow’s approach limited to the selection and institutionalization of ideas and ideologies whose origins were outside the scope of his study. But Wuthnow does not acknowledge this limitation; he expressly intends the theory he develops regarding selection and institutionalization to apply also to the origin and “production of ideas” and to the “shap[ing] of the categories” of thought (pp. 8–10, 22). And, in the historical parts of the book, he does not hesitate to claim that certain ideas “grew out of,” “show the marks of,” “took on the coloration of,” “corresponded with,” and “may have reflected” their social-cultural contexts, as with “Luther’s concept of God, . . . the Enlightenment’s concepts of nature of freedom, [and] the socialists’ classless society” (pp. 323, 329, 245, 244, 493). But claims of this sort are undermined by Wuthnow’s inattention to the concepts in question; for until one knows what was produced, one has too little purchase on the process of cultural production—and thus too little clue as to particular social contexts through which this is best studied. Placed in this circumstance, Wuthnow alternately either falls back (as in the quoted passages) into old standby formulas for linking ideas with economic and political conditions, or opts (when these formulas seem wanting) for the argument that cultural production has “only a loose connection to these conditions” and is, therefore (?), “a more inventive phenomena . . . not determin[e]d” by its context—that is, a set of “creative acts” by thinkers possessed of “visionary” capacities (pp. 582, 149, 130, 137). One wishes that before abandoning the sociological explanation of new cultural contents in this way, so impressive a book as *Communities of Discourse* had reckoned more fully with some of the many contexts of cultural production that fill the social space between economic conditions and state structures, on the one hand, and individual creativity, on the other.

*Women’s Movements in the United States: Woman Suffrage, Equal Rights, and Beyond.* By Steven M. Buechler. New Brunswick, N.J.: Rutgers University Press, 1990. Pp. xi+258. \$37.00 (cloth); \$14.00 (paper).

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Steven Buechler’s *Women’s Movements in the United States* is a welcome addition to the surprisingly small body of literature that analyzes the

women's movement as a social movement. The book is organized around theoretical topics and compares the women's suffrage movement to the contemporary women's movement in each chapter. As Buechler acknowledges in his introduction, this organizing strategy makes for some repetition. However, it allows the author to focus on theoretical themes, and each chapter stands on its own.

Buechler begins with an analysis of the origins of women's movements. He shows how macro-level changes combined with organizational factors to produce a movement in both the 19th century and the 1960s. Readers familiar with Buechler's sources will not find much new here, but the author does a good job bringing together the arguments of many historians and theorists. One of the interesting observations that Buechler makes in comparing the two eras is that the role of the state was much more central for the contemporary women's movement, although he does not elaborate on the nature of the changes in the American state that created opportunities for the movement in the 20th century.

In a second chapter, "Organizations and Communities," Buechler introduces the notion of a "social movement community" to talk about the informal organizational structures which typically exist alongside social movement organizations (SMOs). This is a useful concept, although Buechler does not always distinguish between informally structured movement organizations and organizational structures outside of SMOs. In focusing on SMOs, some theorists have neglected the social networks, alternative institutions, and other kinds of structures that are often important to movements. As Buechler shows, movements may rely on different types of structures at different points in time. For example, after the demise of women's liberation movement organizations, a social movement community kept this branch of the movement alive. Buechler's discussion of the contemporary movement in this chapter is particularly interesting, as he employs documentary data on the National Organization for Women and the Chicago Women's Liberation Union to explore organizational dynamics.

Buechler turns next to another neglected theoretical problem, the role of movement ideology. His treatment of ideology as a movement strategy or resource is quite congruent with resource mobilization theory. In the case of the suffrage movement, Buechler argues that the ideology of the movement played an important role in bringing about victory. He identifies major ideological strands in the contemporary movement and discusses their role in movement mobilization over time. This discussion is related to Buechler's concept of a social movement community, as ideologies can outlive SMOs via informal political networks.

In the chapter "Classes and Races" Buechler examines the problems that U.S. women's movements have had in diversifying. He argues that white middle-class women are most likely to join women's movements because, while these women are aware of gender inequities, their structural location makes them "unconscious" of their own race and class. Nevertheless, there has been some diversity in women's movements at

different points in time, and Buechler suggests that class differences have been somewhat easier to overcome than racial barriers (although he does not actually have data to support this claim). This discussion is linked to that of ideology, as Buechler argues that the mainly individualist ideologies of women's movements have lacked appeal for black and working-class women. This is not true of socialist-feminist ideology, however, and I think that in this case the problem was not so much that the ideology was inadequate, but that groups like the Chicago Women's Liberation Union lacked the organizational structures and tactics necessary to attract a diverse membership.

In his chapter "Opposition and Countermovements" Buechler notes that "opposition to women's movements is distinctive because it often consists predominantly of other women" (p. 171). His comparison of opposition to the suffrage movement and opposition to the contemporary women's movement reveals a striking similarity in the concerns of women in both eras. Buechler also looks at the interaction between movements, countermovements, and the state, but does not have the detailed data on actual conflicts that I think is necessary to further develop theories of movement-countermovement dynamics.

A final chapter, "Endings and Futures," examines the determinants of successes and failures—another neglected problem in the study of social movements—including organizational strength, political opportunities, and the responses of other actors to the movement. Buechler's analysis points to the complexity involved in analyzing movement outcomes and the need to look at the multiple effects of movement activities.

*Women's Movements in the United States* brings together a large body of secondary material, together with some primary data, to provide a broad overview of many important issues. It does not offer a close-up look at the organizations and activities of women's movements, but it may well inspire such studies.

*Saving the Earth: The History of a Middle-Class Millenarian Movement.* By Steven M. Gelber and Martin L. Cook. Berkeley and Los Angeles: University of California Press, 1990. Pp. ix + 337. \$40.00.

Anson Shupe

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This monograph, coauthored by a historian and a religious studies scholar, uses interviews, observations, and archival documents to reconstruct the history of a millenarian movement that began as a purely nonsectarian study group on the historical Jesus, evolved later into an outright sect, and from that eventually became a totally secular antiwar movement. Initially, in the early part of this century, the members of the study group created a seminar series entitled *Jesus as Teacher* to reinvigorate the faith of students and academics, and they deliberately



eschewed any formal structure or leadership. Like entropy, however, that anti-institutional spirit was gradually replaced by a growing rigidity and even bureaucratization. By the 1960s the group, now known as the Creative Initiative Foundation, sought members from society at large and had moved far from its simple emphasis on the New Testament. Infused with gnosticism, feminism, Jungian psychoanalysis, and ideas that today we would recognize as representing New Age, New Thought, and the Human Potential Movement, its leaders had transformed it into a demanding and complex millenarian sectarian organization. By the 1980s, pursuit of a still wider constituency and a refocusing of their millenarian visions led the leadership to drop all religious trappings and move in the direction of an environmentalist and antiwar movement called Beyond War.

In meticulous detail the authors work through the dynamics of this evolutionary process, showing how a complex mix of social psychological, temporal/cultural, and social organizational factors shifted to create each new variation. For example, at any given point in the life of the movement there existed a dialectical tension between those members with a homocentric (or, roughly put, an other-worldly) orientation and those with a sociocentric (or inner-worldly) vision. The first group wished to separate into an exclusive community of believers and accomplish world transformation gradually through individual transformation. The second group advocated the same individual transformation but also getting out and networking in alliances with others, even nonbelievers, to attain pragmatic goals. At each change in its organizational trajectory the movement's leadership had to struggle to find some workable synthesis of the two views, sometimes inadvertently drawing on personality flaws and fears to determine the exact forms.

The primary strength of this study for sociologists is that it offers a detailed analysis of a group using the general concepts of social exchange theory and religious economy, perspectives now popular with many sociologists of religion. As the movement evolved, it made greater demands (or costs) on members; concurrently it was faced with offering them more in return by way of status, ideology, and epistemological certainty. Such an economic model helps make sense of specific forms in belief and life-style that emerged over time in the movement.

The authors make much of the historical dimension of their study, claiming that it is fairly unique in a field of otherwise synchronistic studies of new religious movements. Moreover, with their longitudinal analysis they say they have advanced beyond the mere typologizing of groups in studies currently available. This is a curious claim, since we have had for some time extensive historical/structural analyses of such well-known groups as the Church of Scientology, the Hare Krishnas, the Unification Church, and numerous other less well known cults and sects, including the communitarian experiments of the 19th century. Nevertheless, this study will be of interest to sociologists who want to see how the social exchange model can be applied in depth to an evolving social movement.

*A Winter of Discontent: The Nuclear Freeze and American Politics.* By David S. Meyer. New York: Praeger Publishers, 1990. Pp. xxii + 294. \$47.95 (cloth); \$16.95 (paper).

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All the dissertations about the peace movement that were launched when it was thriving in the early 1980s are now appearing as books, and this is among the better ones. *A Winter of Discontent* provides detailed information about many aspects of the Nuclear Freeze effort, ranging from origins, internal tensions, and strategies to media coverage, public attitudes, congressional responses, and co-optation. It also touches on assorted related topics, including brief discourses on military spending, arms control, related social movements, and the relationship between public opinion and governance. All this is presented in 16 bite-sized chapters.

The weakness of the book is that the pieces never blend into a tight argument, and even the time period jumps around frequently. Despite a theoretical chapter—probably an unfortunate choice to start the book—Meyer deploys something of a kitchen-sink approach to his account of the Freeze, sprinkling pieces of analysis throughout the book but not saying much about how they fit together. For my taste this is satisfactory, but many readers will want a conclusion that contributes to our understanding of general processes of social movements and political action. Meyer's methods of research are not discussed. He participated in the movement, yet he does not speak in the first person. He refers to a few personal interviews, and uses many internal memos to which he had special access. But he primarily relies on published sources. To me, methodological eclecticism is warranted in studies of social movements, since the phenomena themselves comprise so many activities in different institutional arenas. But more "disciplined" sociologists will not be pleased.

The story that emerges goes like this. Reagan's arms policies were not terribly different from those of previous administrations, but they were presented in a language both bellicose toward the Soviet Union and cavalier about the dangers of nuclear war. Various officials spoke seriously about the possibility of a nuclear exchange and made it clear the administration was not very sincere about arms control negotiations. Plus Reagan rapidly increased military spending while refusing to raise taxes—all this in the middle of a stinging recession. Since much arms control negotiation has more symbolic value than real impact in reducing arms, Reagan's aggressive symbolic message was loudly heard.

Many activists from a variety of left and liberal causes who were shocked by Reagan's election (for whom the Freeze was a way to express a general discontent with Reagan policies) were joined by arms control experts who were no longer being included in deliberations. Meyer places great weight on the criticism from experts as key in mobilizing protest,

pointing out that general public opinion changed rather little. Mainstream institutions like the news media and organized religion then began to question Reagan's policies. Public interest groups—including those left over from previous peace campaigns—could be brought aboard the emerging movement. Unfortunately we are more than halfway through the book when we begin to learn about the Freeze movement itself.

Just as interesting is the fate of the movement. Meyer describes a series of efforts to broaden the base of support for the Freeze, showing that they always involved narrowing and diluting the goals. For example, many movement leaders, worried that the Democratic party would absorb the movement, concluded that the movement should move even further toward the center of the political spectrum in order to appeal to Republicans too. Those who continued with direct action tactics faced severe repression, including not just fines but jail sentences—penalties that might have been avoided had the movement remained solidly behind the radicals. When the movement peaked in 1982, many members of Congress jumped on the bandwagon, but in doing so twisted the Freeze idea in many different directions. Compared to highly visible politicians like Edward Kennedy, movement organizers were almost impotent to define the issue. Freeze proposals became so meaningless that hawkish conservatives even began to support certain versions. Given the movement's elite support early on, its taming should probably come as no surprise. Meyer ends with a valiant argument that the Freeze movement, while dissolving in the mush of mainstream electoral politics, had a broader impact on attitudes and policy.

Despite the book's flaws, *A Winter of Discontent* should find an audience. Students of social movements will find interesting details. My own favorite was the common tactic of pouring one's own blood onto weapons and other war technologies, and to hit weapons with hammers. The symbolism of this is rich indeed. The book should also find a place in courses on social movements and social problems, especially if the instructors are willing to draw out the theoretical points from the wide-ranging materials presented. Although the Freeze effort was short-lived, it has implications worth pondering.

*Beyond the European Left: Ideology and Political Action in the Belgian Ecology Parties.* By Herbert Kitschelt and Staf Helleman. Durham and London: Duke University Press, 1990. Pp. viii + 262. \$39.50.

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The emergence of electorally significant New Left and ecology parties marks one of the most profound transformations of Western European politics in recent times. Whereas the American social movements of the

1960s and 1970s left only a small imprint on the political system, their European counterparts were more successful in transforming themselves into political parties and reshuffling the established cleavage structures and electoral alignments. Playing by the rules of parliamentary democracy and interest politics, however, also militated against the initial utopian impulse of the "new social movements" that had set out to offer a participatory and communal alternative to bureaucratic statism and corporate capitalism. How do the new parties relate to the movements from which they have risen, how do they balance the competing claims of ideology and effectiveness, and how do they recruit activists, devise strategies, and make decisions?

One of the merits of Herbert Kitschelt's work is to have shed light on the internal life of the new ecology parties, which have so far received surprisingly scant scholarly attention. Kitschelt's previous comparison of the German and Belgian Green parties (*The Logics of Party Formation* [Cornell University Press, 1989]) is easily the most erudite and detailed study on the topic available today. In that study, Kitschelt developed a sophisticated theory of party formation that combines a macroanalysis of institutional context and cleavage structures with a microanalysis of the motivations and ideologies of party activists, factional strife, and organizational development. Given the high expectations generated by the first book, *Beyond the European Left* is somewhat disappointing. While no new theoretical design or empirical findings are presented, Kitschelt does employ a new methodology. Whereas Kitschelt's previous book was based on qualitative expert interviews, *Beyond the European Left*, coauthored with Staf Hellemans, follows a quantitative strategy. It relies on a fairly representative membership sample of the Belgian ecology parties Agalev and Ecolo. Considering that very few reliable surveys of ecology party activists exist today, there is substantial merit in that enterprise. But the lack of new insight and information, in combination with unnecessary technicalities sprinkled throughout the narrative, makes this reiteration of the same theoretical scheme very dry reading indeed.

Despite the considerable methodological sophistication displayed in this study, the biggest problem seems to be the initial choice of case. Kitschelt and Hellemans's declared interest is to "identify common attributes characterizing all left-libertarian parties which may set them apart from the conventional European parties" (p. 11). However, the generalizing potential of only one case is naturally limited. A cross-national or cross-sectional research design would have been more appropriate for that purpose. Moreover, as the authors admit, the "left-libertarian" cleavage mobilization in Belgium is weaker than in most other countries of Western Europe. If the research interest is in the general European pattern rather than in a thick description of the Belgian case, why limit oneself to the latter?

The strength of *The Logics of Party Formation* was to link the relative hegemony of "ideological" or "pragmatic" forces in the German and Belgian ecology parties to the broad social and political context, such

as cleavage mobilization, polity structure, and the parties' competitive positions. Since *Beyond the European Left* covers only one country, the micro-macro linkage is less easily made. Given that the political-institutional context is the same for Ecolo and Agalev, the authors spend all too much energy on demonstrating that the high left-libertarian cleavage mobilization in the prosperous Flanders breeds the more "ideological" style of Agalev, whereas the low cleavage mobilization in the less economically fortunate Wallonia makes for the preponderance of "pragmatists" in Ecolo. So what? We hear almost nothing about the ethnolinguistic divisions, between the Dutch-speaking Flanders and the francophone Wallonia, that are responsible for the strange coexistence of two ecology parties in one country. We also hear little about the obviously paradoxical impact on the parties of Catholicism in Flanders and atheist secularism in Wallonia or of the glaring ethnic and cultural differences in a long-established European nation-state just slightly bigger than Los Angeles county. The typology of "pragmatists," "idealoguees," and "lobbyists" that is used to account for internal party variation betrays a certain neo-Marxist hangover and country-blind schematism, and it often proves incapable of slicing and arranging the data in more sensible and interesting ways. In a revealing passage, the authors claim to "explore political action in two West European ecology parties" (p. 11). This is a rather peculiar optic, considering that both parties operate in the same country. In their search for the general contours of the "second European left," the authors skip too easily over fascinating country-specific detail. Again, this is a matter of perspective and research design. Through the impressive battery of statistical tables, multivariate analyses, and regressions, the reader simply cannot make out the particular contours and the story of the parties and the activists involved.

Despite my nit-picking, this book will help Kitschelt in establishing himself as possibly the leading scholar of Western European alternative politics on the American scene. *Beyond the European Left* sets standards in theoretical force and methodological rigor that are yet to be matched by competing accounts. No one working on related topics can afford to ignore it.

*The Rise of the Paris Red Belt.* By Tyler Stovall. Berkeley and Los Angeles: University of California Press, 1990. Pp. xvi + 249. \$37.50.

Rick Fantasia  
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This is a book about the temporal and spatial dimensions of political culture. More specifically, it is a study of the means by which a communist political culture became rooted in the working-class suburbs of Paris in the interwar years. The book is based on a case study of Bobigny, a

community to the northeast of Paris. The author chose Bobigny because of the unbroken (save for the German occupation) electoral support it has given to the French Communist party (PCF) since the party was founded in 1920. A historian, Tyler Stovall sought to understand how and why the PCF garnered such strong support in the suburban "Red Belt" of Paris, and how, in turn, it shaped the character of one local community.

The book is organized into two parts: the first, "The Growth of Working Class Suburbia," focuses on the social and urban history of Paris and its suburbs in the late 19th and early 20th centuries; part 2, "The Origins of Suburban Communism," concerns the political culture of the Red Belt. The author ably documents the impact that immigration from rural areas, industrial expansion outside Paris, and urban redevelopment under the direction of Baron Haussmann had upon the suburban migration of a rapidly expanding industrial proletariat. Haussmann's depopulation of the city center, combined with patterns of new housing construction that served to mainly benefit the wealthy, created a severe housing crisis for poor and working-class Parisians. At the turn of the century, rising housing costs were putting pressure on the ability of workers to maintain adequate diets, while overcrowded living conditions, the lack of sewage facilities, and a minimal trash collection system were producing death rates for tuberculosis that were five times greater in working-class *quartiers* than in more affluent districts. The author documents how the development of mass transit to the suburbs served to address the Paris housing crisis by providing a safety valve for the problems of urban overcrowding while, at the same time, industrial development in the suburbs was requiring ever larger numbers of unskilled workers (in contrast to the workshops of Paris, which depended on skilled and artisan labor). Thus, Stovall is able to show how the social foundations of the Red Belt were constructed at the social and spacial intersection of urbanization and industrialization.

Bobigny's development took place at the end of World War I as a large wartime refugee population and the housing shortages caused by wartime restrictions on construction pushed the urban working-class population further outward to what had previously been a rural village. According to Stovall, the dream of owning one's own home in the country had been a common one for French industrial workers, a dream encouraged by social reformers anxious that working-class urban districts were becoming breeding grounds of moral decay and revolutionary sentiment. The means by which the suburban dream could be realized in villages like Bobigny were through the sale of allotments (*lotissements*), or simple, unfinished, and relatively inexpensive housing subdivisions plotted on farmland. Those who bought allotments had to build their own houses, and thus the quality of housing was limited by the financial resources and building skills of the owner. Because of the rapid pace and unplanned nature of allotment housing in Bobigny, infrastructural support

lagged far behind sales; residents soon found themselves mired in muddy fields without proper utilities, sewage systems, or sidewalks. Ironically then, according to Stovall, far from dampening the revolutionary impulses of industrial workers, the suburban allotments came to symbolize many of the problems associated with unfettered capitalism (rapid urbanization, profiteering, and greed). The SFIO (Section Française de l'Internationale Ouvrière), the movement out of which the PCF emerged in 1920, made this the center of their strategy for mobilizing the working class of Bobigny. Thus, according to Stovall, "From the first words of their manifesto, the Socialists of Bobigny identified their constituency as the working-class residents of the allotments, the *mal-lotis*, who had come to the community to realize their dreams of owning homes in the country and had instead been confronted with life in suburban slums" (p. 96).

Despite the PCF's national emphasis on workplace politics, the increasingly proletarian makeup of the population, combined with an effective strategy for mobilizing the *mal-lotis*, served as the basis for communist electoral success in Bobigny. The party achieved its popularity because it was widely seen as having developed an infrastructure of utilities that tangibly improved the quality of life in Bobigny for working-class property owners. Just as important, the party developed a "social infrastructure" of marketplaces, schools, and summer camps that created not only a sense of local community but, because of the class character of the population, a community with a sharp working-class consciousness. Political demonstrations were colorful, festive affairs that embodied elements of carnival, performance, and spectacle to successfully link local pride to a sense of working-class solidarity that, together, redounded back to the electoral success of the party and its "Red Patriarch," Jean-Marie Clamamus, mayor of Bobigny through the 1920s and 1930s.

Though the communist culture of Bobigny is nicely detailed by Stovall, my sense is that some may find the analysis of local politics centered too heavily on the activities of Mayor Clamamus and the party leadership, with not enough analysis of the day-to-day work of mobilizing by party militants. A richer focus on the party membership might have revealed more of the complexities and contradictions of participation (of the sort generally found in social movements) than we get from a perspective of "the party" as the main political actor. The view of politics we are offered is a view from a distance, of a paradoxically "elite" politics that essentially consists of calls for demonstrations, declarations, and resolutions echoing national PCF positions and the donation of money to strike funds. While this analytical emphasis may very well have been dictated by a lack of available historical data on the day-to-day life of party militants, it may also be a function of the centralism of PCF political practice. If the former, then the author might have made it clearer to the reader, and if the latter, it should have been the basis for a more

sustained critical analysis of party practice in Bobigny and, by extension, in the rest of the Parisian Red Belt (an extension, incidentally, which is perhaps made too quickly on the basis of a single case study).

Despite these weaknesses, *The Rise of the Paris Red Belt* makes a significant contribution to the historiography of working-class movements because it highlights the disjuncture between class as an objective structural characteristic of the division of labor, and class consciousness as an expression of political subjectivity shaped by social forces relatively independent of it. For Stovall, politics matters, and thus class consciousness is viewed as a phenomenon that does not automatically spring from the class structure and is not necessarily generated in the sphere of production at all, but must be mobilized by political actors and cultivated in cultural terms. The book provides a good balance of structural and cultural explanation and adds to our understanding of communist movements by grounding the history of French communism in those local issues that have gained it respect among its supporters, something that has too often been misunderstood when viewed through the filters of the Cold War.

*The Politics of Social Solidarity: Class Bases of the European Welfare State, 1875–1975.* By Peter Baldwin. New York: Cambridge University Press, 1990. Pp. xiii + 353. \$44.50

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The sociology of comparative welfare states has become a crowded field, producing diminishing expectations that something fundamentally original might emerge. Yet, here is a marvelous book by a young historian that threatens to crowd out most of us sociologists in terms of the canons of both historical *and* sociological analysis.

Baldwin's study is on the social origins of contemporary welfare states; his chief target is the "laborist" (or working-class mobilization) thesis as put forward by Korpi, Stephens, and, alas, me as well. Baldwin is a historian daring to challenge the sociologists on their own turf. And he does this very effectively indeed. He sets out to demonstrate, with the tools of rigorous historiography, that the welfare state characteristics normally attributed to labor movements actually originated in bourgeois politics and that, accordingly, the laborist theory does not hold up to thorough scrutiny. The dependent variable, so to speak, is studied in terms of three key characteristics: universalism, fiscal redistribution, and benefit equality. The study is mainly about pensions (not the welfare state, as the subtitle misleadingly suggests) in Denmark, Sweden, Britain, France, and Germany.

The single most important contribution of the book is its very innovative and highly compelling specification of the "black box" between



social classes and political demands. The argument is that social security demands are best understood in light of how risk communities coalesce. Risk communities are defined in terms of their relations to the means of security, and they may or, more likely, may not coincide with class identity. The single most powerful element of this book is Baldwin's empirical treatment of the nationally and historically unique formations and breakdowns of risk alliances. Solidarity emerges when risk coalitions help themselves. Baldwin claims that the middle classes were historically critical in forging solidaristic social policies. In Scandinavia, he argues, responsibility for universalist solidarity lay primarily with the agrarians: conversely, on the European continent the working classes emerged as a chief obstacle to solidaristic reforms. When put modestly, his refutation of the laborist thesis goes like this: "The working class's strength and organization is but one instance of a broader logic of social interest behind the welfare state" (pp. 8–9). However, Baldwin is somewhat guilty of overplaying the causal influence of the middle classes and/or the bourgeois parties. Occasionally, the analysis slips away from its grounding in risk groups and builds primarily on political parties. The question remains, Does the book effectively refute the laborist thesis?

The answer is a qualified yes. The Swedish and British stories are very convincing. I am, however, less happy with the Danish case, where, true enough, the agrarians were the decisive force behind the original flat-rate "universal" pension. Yet, being strictly means tested and quite stigmatizing, its universalism is in doubt. Moreover, Baldwin's own empirical analyses (pp. 147–57) demonstrate that genuine universalism was furthered by the social democrats (with their radical allies), and initially opposed by the rightist parties. Strangely enough, in neither the Swedish nor the Danish examinations does the book systematically treat the constraints that were imposed on labor by their dependence on parliamentary alliances. These would provide an excellent focal point for the risk-coalition thesis. The treatment of France and Germany can also be challenged. First, others in the "laborist" tradition have already pointed to the limits there of a laborist explanation of welfare. Furthermore, as the data demonstrate, the Left in both countries pushed for solidaristic reforms after the war, while the Christian Democrats were against universalism outright. This obviously confirms a laborist thesis. The failure of solidarity can simply be ascribed to the Left's political weakness. Baldwin is more compelling in this account of German and French pension reform during the 1960s and 1970s.

In sum, the book is compelling as long as Baldwin modestly insists that the laborist thesis requires elaboration and amendment. But, an occasional impulse to throw the "laborist" out with the bathwater leads to faintly distortive argumentation (as on pp. 288–92). Fortunately, the latter amounts to little more than a drop in what is a huge bucket. Being one of his chief "laborist" targets, I concede much to Baldwin's argumentation, although I cannot say that I shall fall down dead entirely.

This is a very important book, one that is certain to become a corner-

stone in the welfare state literature. The risk-coalition approach has helped sociologize a relationship that most sociologists treated as a black box. In the introduction, Baldwin claims that "the search for the social bases of welfare states is far from over" (p. 49). This book does not put a final end to the search, but it does catapult it to new heights of scholarship.

*Fragile Democracy: The Use and Abuse of Power in Western Societies.* By Eva Etzioni-Halevy. New Brunswick, N.J.: Transaction Publishers, 1989. Pp. xiii + 194. \$28.95.

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Etzioni-Halevy uses democratic elite theory to examine democracies in advanced Western societies. She argues that this framework provides a middle ground between participatory and pluralist theories on the one hand and Marxist, elitist, and corporatist theories on the other hand. Pluralist theories see power as more widely dispersed than it really is, while Marxist and elitist theories view power as more unified than it really is. The democratic elite perspective, unlike the others, accentuates what is distinctive about the exercise of power in Western democracies: "In a democracy, the basis of the control of resources amongst the different elites differs to a greater extent than it does in other contemporary regimes" (p. 33).

The democratic elite perspective focuses upon a few elites that are very powerful in Western societies. Instead of stressing the role of economic power, the state is viewed as the largest accumulator and central controller of resources as well as the most formidable organization; therefore it is the major center of power. She claims that she turns the Marxist argument on its head by maintaining that the economic and other elites have relative though incomplete autonomy from the state elites.

Etzioni-Halevy maintains that the "relative autonomy of elites is what the principles of democracy are chiefly about" (p. 20). Elites exist that can counteract and restrict the governing elite's power. Another important ingredient of democracy centers upon explicitly competitive elections. However, because the elites that have relative autonomy are not elected by the general public, a contradiction or dilemma for democracy exists that cannot be avoided. Even if these elites were elected by the people, this would go against the principle of freedom of organization that is also a characteristic of democracy. The governing elite is restrained by the relatively autonomous elites; yet these restraints may be inadequate and are always fragile, putting democracy in a precarious position. While crucial to the definition of democracy, voting power is not considered a potential force keeping the governing elite from abusing its power.

The elites particularly crucial to the development of democracy are the

political parties, the economic, bureaucratic, and social protest movement elites. Political parties provide the basis for the organization of the independent opposition. Etzioni-Halevy notes the increasing government intervention in the economy, which has been counterbalanced by the economic elite's greater power due to its growth and concentration of economic enterprises and oligopolization of the markets. There seems to be an assumption that government intervention works to the disadvantage of the economic elite, but this certainly need not be the case.

Regarding the bureaucratic elite, it was not until the 19th century that bureaucracy developed, and gradually the government relinquished its control. Bureaucracy became a separate structure and was dissociated (incompletely) from party politics. This was more clear-cut in Britain than in France, although the reasons for the differences in the two countries are not examined in any great detail. Social protest movements and their elites may be partially successful in achieving their goals. Etzioni-Halevy notes a paradox in that one of the most democratic forms of participation is also one of the most nondemocratic. When the governing elite responds to leaders of the social movements, it also means nonresponsiveness to other and possibly bigger elements of the society.

A three-dimensional model of governing elite use of power, manipulation, and corruption is presented to help analyze the abuse of power. The dimensions are the degree of overtness, degree of legitimacy, and the devices used. Two recent case studies are discussed: corruption scandals in New York City and use of political criteria to allocate education funds in Israel. Too much interdependence or dependence on the governing elite could increase the corruption of the governing elite. While Etzioni-Halevy focuses on the corruption of the governmental elite, one cannot help but wonder what happens when the other elites are involved in scandals, bribery, and so on, in conjunction with the governmental elite or separate from the governmental elite. Such abuses of power would also make democracy fragile.

Readers' reaction to the book may well depend on how acceptable the democratic elite perspective is to them. Etzioni-Halevy acknowledges that the theory of the relative autonomy of the nongoverning elites cannot be empirically proven (p. 36). The emphasis on relative autonomy without a serious focus on the possibilities of elites' working together and together abusing power is troublesome to me, as is the lack of attention to class dynamics—especially those related to social movements. At the same time the book does, however, help call our attention to one version of elite theory that has been somewhat neglected.

*Class and Community in Frontier Colorado.* By Richard Hogan. Lawrence: University Press of Kansas, 1990. Pp. xii + 250. \$29.95.

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The focus of this work by Richard Hogan is on the sociological problems of class formation and struggle. Hogan does a good job in disposing of simplistic notions of these processes in this comparative historical analysis of development on the Colorado frontier. The diverse experiences of six cities in Colorado during the last half of the 19th century make up the cases isolated for comparison. What stands out in this book is the variety of outcomes within a region and a period of time that the naive observer would expect to have been characterized by a rather homogeneous experience. Hogan tries to manage this diversity by classifying the six cities in two categories: carnival and caucus towns. Carnival towns are places where boosters, who court national or monopoly capitalist interests in hopes of promoting local development, must accommodate the interests of what Hogan refers to as the laboring classes: artisans, workers, and family farmers. The carnival towns identified by Hogan are Denver, Central City, and Greeley. At the height of their development these frontier settlements became a commercial and financial center, a mining supply town, and a farming community, respectively. Caucus towns are distinguished by lack of participation of the laboring classes in the politics of local development. Nonlaboring persons like merchants, speculators, and capitalist farmers were the dominant class forces in these places. Hogan presents the towns of Golden, Pueblo, and Cañon City as examples of caucus towns. These towns developed as a transportation hub, an industrial, farming, and ranching center, and a farming community, respectively.

Hogan notes that he purposely chose these six places to highlight interesting differences between them, and he succeeds in providing the reader with a rich mix of historical experience. To some extent Hogan's effort to categorize these places as either carnival or caucus towns seemed a bit forced. I was often distracted as I attempted to reestablish the reasoning for putting the towns in one or the other of the categories. I found the strength of Hogan's analysis to be in his depiction of the unique experiences of the different places. What I found most useful was the way different economic interests were played out under varying circumstances. The role of petty commodity producers (i.e., artisans, independent miners, family farmers) stands out as particularly interesting. These producers played a key role in opposing the intrusion of national or monopoly capital in the local economies of carnival towns. Not only did they play an active role in this opposition, but their political activities laid the groundwork for future political activity on the part of the working class. This aspect of the analysis supports other historical analyses that focus on the resistance to proletarianization as being at the root

of one of the most explosive class struggles in the history of capitalist development. Hogan poignantly notes the irony of the fact that once workers had developed the consciousness to oppose their exploitation they lost their independent base from which to do so. Hogan's main contribution, however, is the elaboration of his central argument that opposition to capital penetration can take a variety of different forms. Hogan supports this point by contrasting carnival and caucus towns. The experiences of the caucus towns show that *nonlaboring* classes can also take the leading role in opposing the intrusion of national or monopoly capital.

The picture of the complex and *varied* ways in which different class interests come together in the development process is the central point of this book. In this regard, Hogan's treatment of the interaction of established populations like the Native Americans and Mexicans with the white settlers is a bit disappointing. Only in the chapter on Pueblo does Hogan go into much detail on this interaction. Perhaps this interaction was relatively unimportant, but because this issue is not dealt with explicitly the uninformed reader is left in the dark. However, on the whole the reader with some awareness of Colorado history and folklore will appreciate Hogan's insightful sociological analysis of the area's frontier development. A good example of how the author helps make sense of peculiarities in Colorado history is his discussion of the prohibition of liquor sales within the Greeley city limits that was in force until the 1960s. The average Coloradan would have thought that this seemingly trivial prohibition was nothing more than an effort to keep local college students sober, but Hogan demonstrates the class forces that were behind the temperance movement in Greeley in the latter half of the 19th century by way of demonstrating the nature of class formation in this city's history.

Hogan has made an important contribution to the sociology of development literature. Not only is this book a fine piece of historical sociology, but it also offers a number of insights into more contemporary processes of change. Sociologists will appreciate the careful and nuanced analysis of class formation and conflict. Beyond that, anyone with an interest in frontier or Colorado history will find this book satisfying reading.

*Following in Father's Footsteps: Social Mobility in Ireland.* By Michael Hout. Cambridge, Mass.: Harvard University Press, 1989. Pp. viii + 394. \$48.00.

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Columbia University

Sociologists have long been fascinated by the relationship between industrialization and social mobility. The thesis of industrialization suggests

that, as societies industrialize, occupational opportunity becomes more equal, class barriers are weakened, and societies become more fluid and mobile. According to Hout, Ireland represents an excellent case study for testing such a thesis. Unlike other newly industrialized nations, such as South Korea and Taiwan, Ireland belongs to the same Western cultural tradition as the early developed nations. Furthermore, rapid economic growth took place in Ireland rather recently, during the period 1959–73, and the experience of industrialization is still vividly etched in the memory of contemporary Irish workers. By using the complete work history data, Hout successfully maps out the effect of industrialization on the working life course of Irish people.

Industrialization opened up new employment opportunities in the manufacturing and service sectors in Ireland. Within a little more than a decade, both the Republic of Ireland and Northern Ireland underwent major economic transformations. However, these newly created opportunities were not filled by talented people without any reference to their social origins. Instead, the positions were allocated by the old rule, and the underlying association between class origin and class destination was as strong as it was in the 1950s. Family values and ties continued to be important components of hiring, firing, and promotion. The Irish experience suggests that industrialization does not break down class barriers.

*Following in Father's Footsteps* arrives at this conclusion with impressive arrays of empirical analyses on Irish male workers. This book takes full advantage of recently developed quantitative techniques, namely, log-linear modeling and event-history analysis. The combination of methodological strictness and careful substantive interpretation makes this study an extremely productive sociological monograph. The book begins with an excellent chapter on defining the economic, demographic, and political context within which social mobility takes place in Ireland. Hout then examines the detailed patterns of structural mobility and exchange mobility. The structural mobility forced many working men from traditional farming to industrial manual jobs and even to "postindustrial" professional and managerial jobs. However, independent of these structural shifts, relative positions of men from different class origins stayed more or less the same; many men who grew up in privileged families in the 1940s still managed to find advantaged positions in the 1970s.

One of the important methodological issues discussed in the book is the effect of socioeconomic status on intergenerational class mobility. Hout is committed to the idea that socioeconomic status differences among occupations restrict relative mobility chances; he documents the status effect of prestige and education along with the effect of the prevalence of bureaucratic entry and the effect of personal contacts. However, sociologists who study mobility from the class structure and class formation perspective, and who therefore place less emphasis on continuous socioeconomic status, will not be easily persuaded by his analysis. For example, Hout claims that Erikson and Goldthorpe's (*European Socio-*

*logical Review*, 1987) topological model applied to the  $14 \times 14$  Irish mobility tables seriously underestimates vertical effects of socioeconomic status hierarchy. However, Erikson and Goldthorpe's model, which is informed by the class structure perspective, is constructed specifically for the analysis of  $7 \times 7$  tables (not  $14 \times 14$ ) in nine European nations. The potential explanatory power of the topological model does not seem to be fully investigated by Hout.

Hout addresses a number of specific substantive topics of social mobility: the gap between the working class and middle class, mobility patterns of farmers' sons, the role of religion in social mobility in Northern Ireland, equality of educational opportunities, and intragenerational mobility and job shifts. One of the surprising findings is that class is a more powerful determinant of socioeconomic success than religion in Northern Ireland. Despite the attention given to the gap between Catholics and Protestants, the disadvantage faced by Catholics does not explain the effect of class origin on occupational attainment. Hout also found that the effect of class origin among Catholics is as strong as among Protestants.

A massive flow of workers out of the country characterized Irish society until the early 1960s. Hout fully acknowledges the issue of emigration in chapter 1. However, in the rest of the book, this issue is set aside, because the data set contains only men living in Ireland in 1973–74, when the survey was conducted. Hout never fully spells out the potential impact of emigration on the changes in class structure and the patterns of intergenerational mobility. The lack of discussion of the female labor force is another limitation of this study. Because the Irish mobility study is restricted to men, it is not possible to conduct any empirical analysis involving women. However, these limitations do not spoil the main contributions of this study.

*Following in Father's Footsteps* is probably the most thorough and comprehensive study of social mobility in Ireland to date. It will undoubtedly become one of the most influential classics on the relationship between social mobility and industrialization.

*The Colonial Origins of Korean Enterprise, 1910–1945.* By Dennis L. McNamara. Cambridge: Cambridge University Press, 1990. Pp. xiv + 208. \$44.50.

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*University of California, Davis*

South Korea today is one of the most industrialized countries in Asia. Most of its industrial growth has come since 1963—when Park Chung-hee's authoritarian regime gained power and aggressively guided the South Korean economy in capitalism. Virtually all observers characterize South Korea's industrialization as consisting of a strong state allocating considerable capital resources to relatively few, very large conglomerates,

called *chaebol*. These *chaebol* are mostly owned and controlled by entrepreneurial individuals and their families. These families are linked, through marriage and other types of personal alliances, to each other and to government leaders, a situation that has created an "inner circle" of corporate and government elites that essentially run the country.

Besides agreeing on the basic organizational characteristics of the South Korean economy, most observers also agree on how to explain them: South Korea's economic organization stems from economic policies implemented during and after the Park regime (1963–79). However, the book under review, *The Colonial Origins of Korean Enterprise, 1910–1945* by Dennis L. McNamara, shows these conventional explanations to be shortsighted and only partially correct. McNamara's detailed and generally excellent historical study reveals that the same patterns of economic concentration, of family ownership and control, and of strong state/dependent business relationships developed in the earliest period of South Korean economic development and that these patterns have continued largely intact into the 1970s. This book suggests that Park's economic policies built on the legacies of, instead of being a departure from, the past.

McNamara's book builds the historical case for this conclusion. His analysis covers, in detail, only the years from 1910 to 1945, which is the entire period of Japanese colonialism in Korea. McNamara's topic of investigation is narrowly focused on the form and organization of the indigenous economy during Japan's 35 years of colonial rule. His principal thesis, which he reiterates in a number of locations, is that Korean economic organization during the colonial period can best be described as "dependent" rather than "comprador" capitalism. To McNamara, this is an important distinction. Comprador capitalism, he says (pp. 11–12), occurs when indigenous entrepreneurs "[invest] their talents and capital for the most part in an alien firm in their own land," whereas dependent capitalism occurs when entrepreneurs "invest in their own local enterprises," even though their enterprises are enclosed in an economy administered and controlled by an alien power.

Throughout the book, McNamara demonstrates that Korean businessmen, although marginal to the overall economy, attempted to create and expand their own niches in a society politically dominated by a strong Japanese state and economically dominated by Japanese conglomerates, the *zaibatsu*. Those Korean businessmen who managed to succeed did so through building their own closely held and managed core of family-owned firms. Like the Japanese *zaibatsu*, the *chaebol* firms were interlocked with each other or linked to holding companies. But unlike the *zaibatsu*, the Korean counterparts lacked their own banks and had to rely on the state for financial support. Moreover, although several cooperated closely with the Japanese, Korean businessmen had little influence in the government's economic policy and had to depend on personalistic relationships with Japanese politicians and businessmen for such assistance as they were able to obtain.



This theme is built meticulously through seven chapters that form the body of the book. After his introduction, McNamara devotes separate chapters to the growth of indigenous capitalism, the colonial state, and Japanese investments in Korea. He then examines in considerable detail three case studies of successful entrepreneurs, one in finance, one in commerce, and one in industry. An interesting eighth chapter, entitled "Legacies," shows the parallels between dependent capitalism under the Japanese and dependent capitalism under the strong state system that developed in South Korea in the postcolonial period.

Overall, I like this book a great deal. McNamara addresses a fairly narrow topic and does it well. Although the book is generally undertheorized, McNamara makes some valuable observations. The documentation is generally good, and as explained in the errata, the book draws extensively on a variety of Korean, Japanese, and American scholarly works, including those of Kajimura Hideki and Carter Eckert. I had hoped to find more analysis of the economy during the dynastic period before the Japanese occupation, of those Korean businessmen who did not become successful during the Japanese period, of the economic transition and organizational continuity after 1945, and, in general, of the social basis of Korean entrepreneurship. Nonetheless, these are relatively minor shortcomings in a book that opens new territory for Western students of Third World development and that alerts them to the fallacies of explanations for economic change that lack historical and sociological depth.

*Gendered Jobs and Social Change.* By Rosemary Crompton and Kay Sanderson. London: Unwin Hyman, 1990. Pp. xi + 203. \$49.95 (cloth); \$18.95 (paper).

Joan Smith

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*Gendered Jobs and Social Change* is an investigation into changes in the gendered character of paid employment. The heart of the book is a series of case studies drawn from a number of different occupations and industries in Great Britain. Nevertheless, scholars on this side of the Atlantic will be interested, since the materials are packaged in a theoretical discussion of the character of gender segregation at the workplace. There are, however, problems to which I will return shortly.

The authors begin their treatment of the issue of gendered jobs with two introductory chapters, "Men's Work, Women's Work: Some Theoretical Issues" and "Occupational Segregation." At first glance the glue holding the discussion together is all too familiar. Are we dealing with a case of patriarchal relationships put to work at the service of capitalism? Or are we dealing with a subvariant of class relations as these are both a product and an expression of dominant social relations of production?

In the words of the authors, the first chapter is intended to "clear away some of the undergrowth surrounding the issue of gender and class" (p. 2). Quite correctly, the authors suggest that there are, in fact, two meanings to class. One deals with class as social and historical processes, the other as a set of positions or places within the productive structure. Clearly they are much more interested in the first than the second. After a discussion of class analysis the authors turn to a consideration of patriarchy.

It is not surprising that much of this is well-traveled terrain. What is new is the authors' insistence that the gender order is an active creative process that repeatedly reproduces gendered (i.e., power) relations between men and women (and hence their emphasis on class as a dynamic process).

For the authors, and I think quite correctly, occupations are one of the major locations within which this dynamic process is constantly being worked out. What they argue is that, by looking at occupations, the points of change in the gender order can be more fully specified. In short, *occupations* are the occasion for considering *gender* and presumably not of intrinsic theoretical importance. According to Crompton and Sanderson the case studies are used as a method for constructing not so much the typical but rather "theoretical illustrations of the complex process which sustains the gender distribution of labor in the 'public' sphere of paid employment" (p. 22).

Before turning to those case studies the authors present two additional chapters. One is on occupational segregation itself, or rather theories of occupational segregation. All the usual suspects are here—human capital theory, patriarchal exclusion, labor-market segmentation, and the like. The other chapter is a very brief historical overview of developments in Great Britain since World War II.

Pharmacy, accountancy, occupations within the building society industry (known in the United States as the infamous savings and loan industry), and the hotel and catering business are the case studies that take up the next set of chapters. These are relatively dense descriptions of changes in occupational structure, points of pressure where gender segregation appears to be on the wane, and points where it is simply changing its outward appearance. Space hardly allows any great detail here. Suffice it to say that the materials are interesting. The problem, of course, is that these are case studies and subject to the typical limitations of the genre.

The final chapter is the obligatory "conclusions and comparisons." Here the authors return to the theoretical materials presented in the earlier chapters and find that different occupations require different explanations though "in particular instances, some explanations are clearly more appropriate than others" (p. 160). And here is precisely the problem.

Crompton and Sanderson started out to write a book about gendering jobs and social change. Particular occupations were of interest not at all

in their own right but as "occasions" where that process gets worked out. If we are truly concerned about, say, pharmacy, or any of the other jobs described in the case studies, it deserves its own historical account. If on the other hand, we are concerned with the occupation merely as a site of a set of processes, that is an entirely different matter.

It is precisely because Crompton and Sanderson explain what was happening in the occupations they studied rather than the processes associated with gendering that they are unable to provide a coherent theoretical account. Thus the theoretical chapters read like a laundry list rather than an integrated set of propositions that will be used to assess the intellectual problem at hand.

In filmmaking there is an old adage that goes something like this: Don't introduce a revolver in the first part of the film unless you intend to have it go off by the end. In the theoretical chapters a lot of theoretical "revolvers" are introduced without going off, precisely because they will be used in the end, not as part of a coherent theoretical account but as ad hoc descriptions of the occupations described in the case studies.

As a prolegomenon to a sustained effort to create a theory of gender segregation, the book holds out promise. And in its own right it offers the reader an excellent overview of the theoretical problems involved in that effort. But it is still a long way from presenting a theoretically based account of gendering in the sphere of paid employment.

*Ethnicity at Work: Divided Labor on a Central American Banana Plantation.* By Philippe I. Bourgois. Baltimore: Johns Hopkins University Press, 1989. Pp. xviii + 311. \$38.50.

Nestor P. Rodriguez  
*University of Houston*

In *Ethnicity at Work* Philippe I. Bourgois makes an important contribution to the literature on the interrelationship between ethnicity and class. Using historical sources and fieldwork, Bourgois describes the development and maintenance of a multiethnic labor system on a United Fruit banana plantation spanning the Costa Rica–Panama border.

Conceptually, Bourgois, an anthropologist, is concerned with the relationship between ethnicity and power relations within the production process of the banana plantation. Bourgois views ethnicity as an integral part of class relations, and not as an exogenous variable that can be isolated or dissected from the production process or from class relations. He elevates ethnicity to the level of a social force: "there is no either/or relationship between class and ethnicity; the two are part of the same process of struggle. . . . Ethnicity is not a characteristic or even a social relationship; it is a dynamic, ongoing, historical confrontation" (p. 226).

Eleven of the book's 14 chapters detail the labor experiences and interrelations of Amerindians, West Indian immigrants, and Central Ameri-

can Hispanics in the plantation's operations on the Atlantic side of the Costa Rica–Panama border. The chapters tell the now-familiar story of managerial divide-and-control strategies among ethnically distinct waged work forces. Affected by widespread intergroup prejudices and managerial manipulation, the plantation's social division of labor forms an ethnic hierarchy. The ethnic occupational hierarchy, however, has always been in flux (except, of course, for the white managerial echelon) during the plantation's 90-year history. In the early 1980s, Guaymí Amerindians are considered by management to be equivalent to the Nicaraguan laborers of the 1930s, who, in turn, were considered equivalent to the Jamaican workers at the turn of the century. According to Bourgois, "changing correlations" (p. 219) of economic and ideological forces affect the ethnic succession in the plantation's occupational structure.

Ethnic-group definitions and stereotypes used in organizing the plantation's social division of work are not simply superimposed from external settings. To a considerable extent, for management and workers alike a group's "labor quality" (p. 194) and politicization on the plantation are considered ethnic traits. "Chiricanos like to strike, Indians like to work" (p. 204) is one of many labor-related phrases used by workers to depict ethnic distinctions on the plantation.

Bourgois uses a dynamic, narrative analysis to support his central argument of the near synonymy between ethnicity and class on the plantation. Using a wide variety of sources (personal interviews, company records, newspapers, etc.), Bourgois lays bare the local, national, and international situations that prompted the plantation's management to favor one ethnic group over another at particular points in time. Bourgois gives a penetrating analysis, one that skillfully weaves micro-level accounts into a macro context. Through a large number of secondary materials and field observations, Bourgois successfully recreates the day-to-day ambience and tempo of the plantation's multigroup operations. This is a formidable task given the numerous subgroups that make up the major ethnic categories in the plantation's labor system. Amerindians (*cholos*) include Bribri, Guaymí, and Kuna. West Indians include immigrants from Jamaica, Barbados, Trinidad, the Leeward Islands, and the French-speaking colonies of Martinique and Guadeloupe. Central American Hispanics include Hondurans, Nicaraguans, and several regional groups (Chiricanos, Guanacastecans, etc.) from Costa Rica and Panama.

In spite of Bourgois's exhaustive treatment, a reader may come away from *Ethnicity at Work* with unanswered questions. I came away with two. Would it have been analytically enriching to differentiate between ethnicity and race? For example, Bourgois states that even when Hispanics were at the bottom of the plantation's labor hierarchy they never faced the same intensity of "ethnic discrimination" (p. 219) as did black and Guaymí workers. Bourgois attributes this difference to Hispanics' being the dominant national ethnic group. But could race also have affected this differential treatment? This is a very problematic question to

address in Hispanic settings, since often the notion of "ethnicity" is combined with the concept of "race" in the Latino popular concept of *raza*.

My second question concerned the effect of the culture of origin on ethnic-group behavior inside the plantation beyond being a source of intergroup prejudices and predispositions. With the exception of the Guaymí and the Kuna (the latter maintained a sort of cultural cop on the plantation), little is elaborated about the different ethnic groups' cultural adjustments to the plantation mode of production. In fairness to Bourgois, this is not a central issue in his book, since he is primarily concerned with how social relations in the production process define ethnicity.

*Ethnicity at Work* should interest social scientists in a wide variety of research fields. It should especially interest those concerned with issues of intergroup relations in the workplace or with strategies of labor control in multinational corporations. With a penetrating analysis and a dynamic writing style, Bourgois turns an old story of class-ethnic relations in the workplace into a new one.

*Locality and Inequality: Farm and Industry Structure and Socioeconomic Conditions*. By Linda M. Labao. Albany: State University of New York Press, 1990. Pp. xiv + 291. \$49.50 (cloth); \$16.95 (paper).

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One of the most persistent debates in American rural sociology over the past 50 years centers on the relationship between farm structure and socioeconomic well-being. This debate was framed by Walter Goldschmidt in the 1940s when he reported the results of his research on two farming communities in California (*As You Sow* [New York: Harcourt, Brace, 1947]). The two communities studied by Goldschmidt were similar in size, and the surrounding farms generated equal amounts of agricultural sales. However, one of the communities was dominated by large-scale, corporate-type agriculture and the other by smaller-scale, family farm operations. Goldschmidt found the quality of life and standard of living in the community dominated by large-scale, corporate farming were substantially lower than those found in the family farm community.

Since the time Goldschmidt reported his findings, there have been over 25 attempts to test what has become known as the "Goldschmidt hypothesis." The results of these researchers have generally supported Goldschmidt, but there has been enough contradictory evidence to merit continued attention to how industrialized farming effects socioeconomic conditions. Linda Labao's research monograph, *Locality and Inequality*, stands as the most thorough and in-depth treatment of the Goldschmidt hypothesis to date.

The book is divided into nine chapters. After an introductory chapter in which Labao presents a cursory overview of some theoretical perspectives on inequality and locality, the next three chapters focus on the political economy of farming, the relationship of farm structure, and how nonfarm factors such as the structure of industry and worker power affect inequality. The purpose of these chapters is to situate the Goldschmidt hypothesis in the context of a broader framework on inequality in which there are three key elements: farm and industry structure, the bargaining power of workers and their households, and locational characteristics. Overall, these chapters are a useful, if sometimes disjointed, review of a rather large body of literature.

The data and methods used in the monograph are discussed in chapter 5. Although Goldschmidt used the rural community as his unit of analysis, Labao uses counties as her analytical units. The decision to use county-level rather than community data is made for a variety of mostly pragmatic reasons, not the least of which is that secondary data are more readily available at the county level. Focusing on data from 1970 and 1980, Labao constructs a variety of indicators to tap patterns of farm structure, local industrial structure, worker power, and spatial structure. In all she identifies over 40 major independent variables. Socioeconomic inequality, the dependent variable, is described by several measures, including median family income, poverty, unemployment, and infant mortality.

Chapters 6–8 present a wide variety of regression and other multivariate analyses designed to test the Goldschmidt hypothesis from as many angles as possible. These chapters are tedious going since we are presented with cross-sectional regressions, lag panel regressions, longitudinal regressions, regressions for all U.S. counties, and regressions broken down by different regional schemata. In all there are nearly 60 different regressions reported in these chapters with literally hundreds of beta coefficients to examine. The bottom line after all of the data analysis is that Labao finds “limited support for the Goldschmidt Hypothesis that industrialized farming reduces socioeconomic conditions across U.S. counties” (p. 213). Beyond this, the results show, not surprisingly, that industrial structure, worker power, and spatial location are all related to well-being.

The final chapter, titled simply “Conclusions,” attempts to draw together all of the themes and findings from the preceding chapters and to point to new directions for research and policy. This is a well-crafted ending to the book and can serve as a primer to those interested in learning something about the New Rural Sociology. Rural America has undergone a profound transformation over the past 50 years as farm numbers have dwindled, farm size has increased, and nonfarm employment has become the norm. Rural sociologists like Labao are bringing theoretical insights from sociology, economics, and geography to help understand the causes and consequences of this restructuring process.

*Ethnic Ethics: The Restructuring of Moral Theory.* By Anthony J. Cortese. Albany: State University of New York Press, 1990. Pp. xi + 197. \$44.50 (cloth); \$14.95 (paper).

Neil J. Kressel

*William Paterson College of New Jersey*

Lawrence Kohlberg's neo-Piagetian approach to moral reasoning continues to inspire important research and theory as well as applications to moral education. Kohlberg focused on the structure of moral thought, identifying qualitatively distinct states of moral reasoning that are hierarchically integrated and organized in a culturally universal, invariant sequence. He died in 1987 but, during the three preceding decades, conscientiously revised, updated, clarified, and expanded his cognitive developmental outlook in response to diverse challenges by psychologists, philosophers, theologians, and—most recently—sociologists.

Anthony J. Cortese's *Ethnic Ethics*, the latest critique of Kohlberg's work, loosely draws together multifarious sociological, philosophical, and statistical perspectives. Many but not all of Cortese's points relate to his thesis that "moral judgement reflects the structure of social relations, not the structure of human cognition" (p. 4). Cortese sets an ambitious agenda for the book, namely, to (1) explore the impact of ethnicity, culture, and language on moral development, (2) elucidate conceptual problems linked to justice and objectivistic-subjectivistic tensions, (3) identify methodological problems in the study of moral judgment, and (4) clarify the relationship between Kohlberg's approach and sociological theory. Although the book's title implies a focus on ethnic issues, this topic occupies only a portion of the author's attention.

The book is organized in seven brief but densely written chapters. Chapter 1 analyzes some philosophical assumptions of Kohlberg's approach, showing that they derive from Kant and, more recently, Rawls. Chapter 2 discusses the relationship between the moral theories of Piaget, Kohlberg, and Durkheim. Chapter 3 reviews Karl Mannheim's *Ideology and Utopia*, suggesting its relevance to a sociology-of-knowledge perspective on Kohlberg's moral theory; unfortunately, the chapter stops short of developing this perspective. Chapter 4 provides an interesting, useful summary of statistical and methodological problems in this assessment of moral judgment; however, this analysis seems poorly linked to preceding and subsequent chapters. The fifth and sixth chapters present Cortese's treatment of the impact on moral reasoning of ethnicity, culture, and gender. Finally, in chapter 7, the author pulls together some of his main ideas and argues that his critique of Kohlberg also constitutes a challenge to the moral theory of Jürgen Habermas.

*Ethnic Ethics* touches on so many areas that this review can address only a small number of Cortese's key arguments. Some sociologists, and more psychologists, are apt to quarrel with his central contention that

"moral reasoning and behavior are determined largely by social factors—role demands, class interests, national policies, and ethnic antagonisms" (p. 2). He is likely to arouse even greater controversy with his argument that "one *cannot* be moral in an immoral social role, whatever one's childhood socialization, psychological predispositions, or commitment to abstract rational principles" (p. 2; my italics).

Moreover, Cortese's characterization of Kohlberg as a pure psychological structuralist does not take into account his later thinking, some of which is not included in the book's reference list. Kohlberg grew increasingly sympathetic to sociological explanations and his thinking is appropriately classified as interactionist, maintaining that both society and cognition contribute to moral reasoning. A pure sociostructural orientation cannot account as well for the wide diversity in moral thought among people in similar social roles.

Cortese's book takes an important step toward focusing our attention on the ethnic origins of moral reasoning. However, several aspects of his approach detract from the book's overall contribution. First, he claims to discuss the impact of ethnicity *in general* yet relies solely on black and Hispanic subjects. We are left with little sense of how other ethnic groups—Jews, Japanese, Chinese, Irish, Italians, Indians, and others—reason about moral issues. Moreover, Cortese speaks often to the "white male" perspective or the "West European" perspective (meaning white); these collapsed categories are hardly sufficient for a study of "ethnic ethics." A second problem with Cortese's approach is that, while he subjects Kohlberg's empirical research to the highest standards of statistical and methodological rigor, his criticism of Kohlberg derives mainly from his own data, which he admits are nonstatistical and nongeneralizable.

Cortese claims that blacks and Hispanics generally base their moral reasoning upon principles of caring, love, and responsibility, as opposed to Kohlbergian principles of justice. Thus, he explains the lower scores of blacks and Hispanics on measures of Kohlberg's stages. Until firmer data are obtained, many sociologists may prefer an attitude of skepticism toward this aspect of Cortese's book, an attitude encouraged by the empirical history of Gilligan's very similar but earlier analysis of sex differences in moral reasoning. Some people may reason in accordance with principles of care, but this tendency is probably not gender-linked, it may not be linked to ethnicity, and it does not invalidate Kohlberg's justice-based stage approach.

Finally, Cortese objects to Kohlberg's search for a universal theory of ethics that eschews epistemological relativism. He regards Kohlberg's defense of Western, justice-based, individualistic values as an anathema. Kohlberg, Allan Bloom, and others claim that one must reject relativism or else no moral discourse or moral education can occur. I suspect that reactions to Kohlberg's approach may typically reflect more general positions in the relativism debate. Cortese adds nothing new on this matter.

In sum, *Ethnic Ethics* is a loosely organized, jargon-laden book that



promises more than it delivers. But it does make a modest contribution to the description of the relationship between ethnicity and moral reasoning. It also clarifies some of the connections between moral philosophy, developmental psychology, and sociological theory.

*Race, Class, and Education: The Politics of Second-Generation Discrimination.* By Kenneth J. Meier, Joseph Stewart, Jr., and Robert E. England. Madison: University of Wisconsin Press, 1990. Pp. xiv + 194. \$14.95 (paper).

Gary Orfield  
*University of Chicago*

A great deal of effort has been invested in getting students into desegregated schools, but far less to the problems of equal treatment within those schools. Although researchers readily admit that what happens within the school is decisively important, there has been little analysis of some of the most important questions of "second-generation discrimination." Meier, Stewart, and England argue that issues of in-school discrimination are extremely important, and their book taps massive but rarely examined federal data files to examine the unequal treatment of black and white students. The book reports very sharp racial differences and relates the result, in part, to black representation among teachers, administrators, and school board members.

Prestige in social science analysis tends to come from statistically complex analyses of survey data that reach new explanations of social processes. Surveys provide evidence on attitudes, plans, intentions, and perceptions and may follow the respondents to find out what actually does happen, permitting comparison between expectations and realities.

Unfortunately, there were no major national surveys specifically examining discrimination within schools. Surveys are so costly that those receiving public funds often reflect the political priorities of a time. The need to obtain permission from schools means that any national survey requires official support. This means that there are many critical issues on which little survey data is available. Thus, limiting research to survey-based work weakens the ability of the research community to participate in analysis of emerging policy issues. To begin to answer the questions on in-school discrimination, the authors of this book turned to a very different source—the federal government's files of official reports from all the major school districts in the United States.

This book examines reports of all school systems with 15,000 or more students, relying mostly on descriptive statistics and simple relationships between variables in the civil rights records. Lacking individual-level survey data, this is all that can be done now. The study offers us a description of a dramatic national pattern of inequality.

The data show that whites are four times as likely as blacks to be in

gifted classes but only one-third as likely to be in classes for the educable mentally retarded. Blacks are twice as likely to be punished physically or suspended and three times as likely as whites to be expelled (p. 153). (Since the data are self-reports by local school officials, it is very likely that they understate the problems.)

There are obvious limitations to the data, limitations that are recognized by the authors and should be kept in mind in evaluating the findings. The data are reported by school officials. The data do not include students' test scores or any indication of their personal problems that may have justified academic classification or disciplinary action. It permits only broad comparisons among groups. The implicit assumption of the comparisons is that fair treatment would produce something like similar treatment across racial lines; given the unequal distribution of problems children bring with them to school this is an oversimplification, but the scale of the inequalities is overwhelming.

The basic educational conclusion of the book is that black students "are resegregated in schools through the use of ability grouping, curriculum tracking, special education and discipline" and that these practices "form the core of an institutionalized process of educational discrimination." The book shows interrelationships between a number of the negative conditions affecting black students. "Placement in classes for the educable mentally retarded, for example, is positively associated with suspensions, corporal punishment, and expulsions."

One of the fundamental goals of the civil rights movement and of black politics in the past decade has been the expansion of the number of black officials and employees in public agencies. The movement for the Voting Rights Act and other changes was that minority officeholders and appointed officials would be more fair to black people and more understanding of their problems. This book attempts to begin a statistical assessment of this claim within public schools.

The authors show that the inequalities of treatment are less severe in school systems where there are more black educators. Among the factors studied, "the single most important factor for all forms of second-generation discrimination . . . is the proportion of black teachers" (p. 140). School districts with larger shares of black teachers tend to have more black students in gifted classes, fewer suspensions, and more equity in other dimensions. The data showed that there were more black teachers in districts with more black administrators and that those tended to be districts with more black school board members. In other words, there was a reasonably clear link from political mobilization to policy equity. Since black board membership was more likely in districts with ward elections than in areas with at-large elections, the authors strongly favored that electoral system (p. 142).

This book is a pioneering effort to learn what this data can tell us about the treatment of black children within school and what difference it makes who is working in the school and running the school district. Although it tends to overgeneralize from the limited data that are avail-

able, it should call the attention of other scholars to the existence of a very important source of basic information about our schools that deserves far more analysis. It also points out the serious possibility that the omission of these issues from much contemporary state-of-the-art survey research may have led to a dangerous underestimation of the persisting problems of discrimination and the need for political as well as technical or market responses to educational inequality.

*Educated in Romance: Women, Achievement, and College Culture.* By Dorothy C. Holland and Margaret A. Eisenhart. Chicago: University of Chicago Press, 1990. Pp. xiii + 273. \$19.95.

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Why did many achieving college women in the early 1980s opt out of high-status careers into marriage and low-status, low-paying jobs? Dorothy C. Holland and Margaret A. Eisenhart's book represents a theoretical and empirical effort to address this question. They examine the relevance for gender hierarchy of class reproduction, cultural production, and resistance theories. During several years in the early 1980s, they conducted in-depth interviews and field studies of 23 college women, 11 of them at a predominantly white southern university and 12 at a historically black southern university. All had strong academic records in high school, serious interest in pursuing a career, and a range of activities and peer networks. The authors, who are anthropologists, supplemented their interviews with a survey of randomly sampled sophomores at the two universities.

Holland and Eisenhart argue that the transmission of gender hierarchy differs from class and race reproduction because, in the latter two, peer groups are relatively united in opposition to school texts and actual practices. For gender hierarchy, however, peers rather than school authorities are the central carriers of stratified social relations. As a result, while some individual women found particular strategies for resisting the "sexual auction block," groups of students did not band together to oppose or resist the central emphasis on heterosexual attractiveness. In response to the theoretical question, Is romance a component of female *resistance* to their harsh social realities in school and work or is it part of the system of oppression women encounter? Holland and Eisenhart conclude that "gender relations interpreted in the cultural idiom of romantic love are more aptly described as imposed upon girls and young women, than as constructed by them as a counterculture in opposition to gender discrimination" (p. 220).

The authors discovered that, among the women studied, "the cultural model of romantic relationships set men up as the judges of women's claims to prestige in the peer system" (p. 106). A woman's attractiveness

was reflected in the kind of men who wanted to date her and how those men treated her. Being attractive was considered necessary for all male and female relationships. They considered the possibility that attractiveness might be symmetrical for women and men but suggest that it was not because men and women had different bases of attractiveness; men's prestige could stem not only from female attention but also from success in sports, school politics, and other areas, while women's prestige depended entirely on male interest.

With romance being a dominant feature of gender relations, a primary consequence was the relatively low importance of academic work for young women. The peer culture did not support serious involvement in academics, or what one young woman dubbed "the brain syndrome" (p. 164). Instead, schoolwork and peer activities were seen as competing domains, with the latter considered more important. As a result, two-thirds of the women studied lost their career commitments over time.

The book does not address *why* women failed to establish alternative prestige systems on the basis of various achievements, independence, or personality. It is not fully clear why women allowed male evaluations to monopolize their self-esteem market. Both campuses had women's studies programs, but none of the respondents were involved with them. The authors point to the "absence of a clear target of oppressive ranking" (p. 217) as a possible obstacle to realizing that women as a group were disadvantaged by the system. I wish they had done more to relate the meaning of romance to structural aspects of society. Did these women feel they needed marriage because they would never do as well on their own as they would married? If so, how much did this cultural evaluation depend on the availability of local or regional career opportunities? What structural supports, if any, helped those in this study who remained career oriented to do so?

Another set of unanswered questions concerns whether the culture of romance would be different or less prevalent, for example, in women's colleges, in colleges in different regions of the United States, in universities with different male-to-female ratios (in both the universities studied it was 40:60), in urban, commuter universities rather than in heavily residential ones, or in schools with larger proportions of returning women students. The authors do not explore these explanations, all of which suggest possibly serious limitations on the generalizability of their conclusions.

The authors might also have considered whether black women are a harbinger of gender relations in the future. They note that black women were less focused on finding a man than white women were and were less likely to expect economic support from men in the future. Is this an increasingly likely future scenario for white women? They do not consider this question. Also, the authors expect that the women studied will change in the future because of aging, although they do not suggest what the changes might be. These are minor quibbles about an excellent book

that is particularly notable for its effort to analyze the applicability of reproduction theory to gender hierarchy.

*Home Advantage: Social Class and Parental Intervention in Elementary Education.* By Annette Lareau. New York: Falmer Press, 1989. Pp. vii + 252. \$49.00 (cloth); \$20.00 (paper).

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Since the mid-20th century, educational reform reports have shifted the burden of blame for the "crisis in education" from school organization and funding to the lack of parental involvement in the educational affairs of their children. While the importance of parent involvement has never been ignored in the educational literature, the fervor with which the idea is now being put forth as *the* cause of student failure is unprecedented. Annette Lareau has written an important and timely book about the ways parents are able (and unable) to shape their children's educational experiences. The real value of the book lies in its ability to resurrect social class as a determining factor in this process. In that sense, the book directly challenges the current view that family SES background is no longer a significant factor in the academic success or failure of school children.

Building on her earlier works that examine the effect of home/school partnerships on academic achievement, Lareau asserts that parents' lack of involvement in their children's schooling "is not random: social class has a powerful influence on parent involvement patterns" (p. 3). Six months of participant observation in two schools (upper-middle-class and working-class) provides Lareau with an impressive number of qualitative data from which she uncovers differences in parental involvement patterns and, more important, locates these differences within the larger social and economic contexts of family life.

Lareau makes two important theoretical contributions to educational studies. First, she refutes the traditional "values" approach to understanding the effect of parents on educational outcomes by demonstrating how social class provides parents with particular sets of "resources" that either facilitate or limit their ability to shape their children's educational experiences. Lareau draws from Bourdieu's notion of cultural capital to frame her discussion of why social class influences patterns of parental involvement in schools and, furthermore, unlocks the potential of the concept by demonstrating *how* parents' access to cultural capital patterns the ways in which they intervene in their children's schooling.

Second, Lareau spends a great deal of time tracing the interinstitutional linkages and class connections between family life, school life, work, and social networks. She argues that, while sociologists pay lip

service to interinstitutional linkages, their conceptual and empirical work often falls short of adequately articulating the effect of these relationships. *Home Advantage* helps fill this gap by demonstrating the dynamics between institutions and exposing how social class—and the various forms of cultural capital that social class provides parents—shapes the type of experiences people have as they move in and out of institutional settings.

Lareau carefully maps out these linkages to discover that parents, regardless of their class position, have similar educational aspirations for their children and participate in their children's education in similar ways, but "social class has a significant influence on the meaning and purpose of these activities" (p. 170). That is, upper-middle-class parents have a greater share of cultural resources than do their working-class counterparts. By cultural resources, she means symbolic access to the world of educated people, social status, confidence, income and material resources, work relationships that mirror teachers' preferred school-family relationships, and social networks that provide more access to educators and general information about schooling. Upper-middle-class parents are better able to activate these resources to build tighter connections between the family and the school, ultimately playing a more decisive role in shaping their children's educational experiences.

Lareau asserts the obvious implications of her findings and encourages educators who design parental involvement programs to take into account how social class influences the ability of parents to intervene in their children's educational affairs. Her recommendations, which range from diversifying involvement strategies so working-class parents have more opportunities for involvement to establishing programs "making children's grades the cornerstone of their program to involve parents in schooling" (p. 181), form the weakest part of the text. Some of her specific suggestions, such as giving out report cards only in parent-teacher conferences or giving children a separate grade for how much work they do at home, seem silly, given the depth at which she has explored the effect of social class on parental involvement patterns. Luckily, this section spans no more than two pages of the book.

This small limitation should not deter the reader from considering the major theoretical and empirical issues Lareau has raised. *Home Advantage* should be read by all current and future educators as well as by sociologists of education. Sociologists will also benefit from the way Lareau has applied Bourdieu's concept of cultural capital to further our understanding of interinstitutional linkages and from her writing of one of the most honest and inspirational personal essays about the trials and tribulations of fieldwork that I have encountered. This section alone should be required reading for students of qualitative research.

*Pursuing Customers: An Ethnography of Marketing Activities.* By Robert C. Prus. Newbury Park, Calif.: Sage, 1989. Pp. 335.

*Making Sales: Influence as Interpersonal Accomplishment.* By Robert C. Prus. Newbury Park, Calif.: Sage, 1989. Pp. 336.

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Sociologists have long been interested in the world of commerce. The study of political economy has quite rightly been considered absolutely essential for understanding the nature of modern industrial society and the trajectory of social change.

Unfortunately, however, political economy, or what is now more often referred to as economic sociology, has overwhelmingly been concerned with economic or business activity on a grand scale, with The Economy as a massive institutional structure. Rare indeed are studies of the everyday practices of the marketplace, of the interpersonal transactions in and through which The Economy acquires its social facticity. Investigation of these ordinary, commonplace encounters involving all sorts of people—variously identified as managers, advertisers, marketing experts, bankers, clerks, salespersons, customers, and such—has been largely left to the microeconomists, whose passion for building formal, mathematically precise models of economic exchange and decision making has precluded any serious study of the natural settings of business life.

These two companion volumes by Robert Prus, a sociologist at the University of Waterloo, report on just this kind of ethnographic research into sales work and marketing activities. In contrast to macrosociological studies of economic processes that remain at the level of institutional order and abstract structural relationships, and microeconomic writings devoted to formulaic representations of economic exchange, Prus argues that business, as a fundamentally social (and thus not simply “economic”) activity, “is best understood by considering . . . the ways in which people *actually* do business” on a day-to-day basis, focusing on their lived experiences” (*Pursuing Customers*, p. 22; emphasis in original).

This stress on “actually” is meant to highlight such contrasts in approach and perspective, suggesting that, until we develop a detailed understanding of the situated behaviors and commonsense understandings that are glossed by ideas like “economic decision making,” the scientific status of our analyses of commercial life is quite problematic. At one point, for example, he states (*Pursuing Customers*, p. 59, n. 15) that Marxist political economists, who have certainly proposed comprehensive explanations of economic activity in capitalist society, in fact, “evidence little familiarity with the details of marketplace exchanges.” What-

ever the value of those political economic explanations for grasping the historical contours of capitalist development, Prus's complaint is a valid one.

Of course, Prus has some grand designs of his own. "The marketplace," he argues (*Pursuing Customers*, p. 304), "epitomizes social behavior," and what takes place there might be thought of as a metaphor for the everyday "exchanges" found in all walks of life: "It is hoped by examining the dynamics of the marketplace, we may learn more about the ways in which people work out their activities with others more generally" (*Pursuing Customers*, p. 23). His aim, then, is not only to provide us with a close look at the details of business interactions, but to suggest how a study of these encounters can enlighten us about some basic features of human interaction—the often rapidly shifting understandings, the give-and-take of negotiating, the coordinating of lines of action. Still, his efforts in this respect are firmly grounded in the details of his observations, and these are rather modestly expanded upon.

In the first of these volumes (while each can be read independently, they are best approached as an integrated pair), *Pursuing Customers*, Prus focuses on how vendors assemble their activities in anticipation of customer encounters, drawing largely on the personal accounts and stories of people involved in marketing and selling a wide range of products. While he also makes some use of observations at trade shows and personal experience in operating a craft enterprise, most of his data are from interviews with 118 vendors. He also makes the argument that one can usefully draw parallels across these various sales arenas (e.g., cars, cosmetics, women's clothing, appliances), paying attention to differences between product areas in styles of selling but nevertheless emphasizing selling and marketing as generic activities. On this point, Prus is persuasive.

Prus begins the analysis with a general discussion of "what marketing is," and of the analytic perspective he favors for making sense of his materials. This perspective owes much to Erving Goffman's dramaturgical approach, with the marketplace viewed as a "great theatre in which there is much drama, suspense, and adventure" (p. 21). But it is the interactionist themes rather than the perhaps more important Durkheimian themes in Goffman's writings that are emphasized. Herbert Blumer's symbolic interactionism and commitment to what Prus terms a processual analysis is also heavily referenced, along with a Blumerian-style version of Mead.

The analysis itself is arranged in a sequence that roughly corresponds to the natural assembling of marketing activities: setting up business, organizing and "doing" management, purchasing products, setting prices, using the media for advertising and promotion, "working the field" and "prospecting" for customers, and exhibiting products. What we have, then, is an extensive discussion of the work that goes into preparing for sales encounters by attracting customers. The second volume in the pair, *Making Sales*, picks up the analysis at the point where



vendors directly encounter these prospective buyers: the sales encounter itself.

*Making Sales* is organized much like *Pursuing Customers*; Prus proposes a natural assembling for sales encounters, beginning with approaching the customer and presenting the product, and moving on to generating trust, neutralizing or overcoming buyer resistance, and, finally, obtaining a commitment to the sale. The problems that arise with troublesome customers, developing customer loyalty, maintaining enthusiasm for sales work, and holding "sales" (in the sense of selling goods at reduced prices) are also addressed in separate chapters.

Goffman's dramaturgical perspective is central to Prus's analysis of these encounters, for notions like "impression management" lend themselves quite naturally to any examination of selling behavior. Ideas presented in Goffman's early writings (notably, *The Presentation of Self in Everyday Life* [Garden City, N.Y.: Doubleday, 1959]) about the strategic and tactical aspects of interaction also provide useful resources for understanding the interpersonal accomplishment of influence. It all makes for fascinating reading and provides us with a wealth of sociological insights.

While I must conclude that Prus is indeed successful in his attempt at providing us with a richly detailed, "inside" view of the people who engage in marketing and sales work and, most especially, of the beliefs that animate their work lives, I think he is somewhat less successful in developing a sound analysis of selling activities. This judgment may seem strange, given that I have favorably noted Prus's coverage of the details of sales encounters and because Prus's entire project is driven by an emphasis on understanding sales work as a set of activities. The problem is Prus's reliance on interview materials. We are presented with many interesting and analytically significant stories and accounts, but with too few close examinations, based on naturalistic observation or recordings, of the actual unfolding of sales encounters in situ. Accounts of frequent or typical encounters or descriptions of past encounters make up the bulk of both volumes.

There is a long and noble tradition in ethnographic sociology and anthropology of basing studies on the stories one hears from informants, and making sense of these stories by familiarizing oneself with the world that they reflect and comment on. I am not unsympathetic to this tradition. Plainly, Prus's work falls within this tradition, and certainly represents it very well (and I do not doubt that he has an intimate understanding of each and every matter with which he deals). But I firmly believe that ethnographic sociology needs to be more committed to developing itself as a natural *observational* science.

*The Soul of the Salesman: The Moral Ethos of Personal Sales.* By Guy Oakes. Atlantic Highlands, N.J.: Humanities Press, 1990. Pp. ix + 113. \$29.95 (cloth); \$9.95 (paper).

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Sociologists have been rediscovering the economy in recent years, resulting in a miniboom of studies about markets, industries, and corporate behavior. Guy Oakes contributes to this boomlet in his study of the moral bases of an important form of economic action under capitalism: selling. Selling is crucial in an economy in which needs must be stimulated and products differentiated from an array of similar products and in which consumers have a seemingly infinite cornucopia of goods to choose from. In *The Soul of the Salesman: The Moral Ethos of Personal Sales*, Oakes explores the ideological underpinnings of selling as a form of social action. The topic is an important one, not only because selling is an economically significant function, but because there are few areas of social life, from religion to politics, that have not been touched by a huckstering manner. Oakes's study contributes to our awareness and understanding of this commercial activity but stops short in a way I found frustrating.

The primary aim of Oakes's study, which is based both on an analysis of sales training materials and on interviews, is to examine the way in which the sales process has come to be defined by contemporary business. Secondly, he attempts to understand the techniques by which a salesperson is made to embrace a sales persona, a selling orientation toward the world. Appropriately, Oakes chose to study the life-insurance industry. Life-insurance companies were the first to institutionalize sales-force training, and the life-insurance agent is nearly an archetype of the salesperson.

More than anything, this book is an examination of the principles of social action that constitute selling. According to Oakes, there are two mutually antagonistic principles that sales agents must embrace. The first, which he calls the "commercial idiom," requires the salesperson to view economic activity as a purely utilitarian, zero-sum game: "Every social relation, every mode of social intercourse, and every interaction, be it insignificant and inconsequential or sacred and inviolable, should be exploited as a way of meeting potential prospects" (p. 21). Sales agents are trained to view the world opportunistically, to list every person they meet as a prospect, and to join organizations as a means of penetrating social networks. A properly trained agent can turn a funeral into an opportunity to sell insurance by "desacralizing mourners as prospects" (p. 26).

The second principle of social action is based on the "service idiom," the idea that insurance agents are trained professionals who can help people achieve financial security. They are specialists who use their knowledge to explain arcane financial products to less sophisticated con-

sumers. The service idiom demands that agents assist the prospect in developing an understanding of the ways in which financial needs change over the life course and how insurance products can protect the income stream from various risks. The selling process is therefore an educational and service function, and the agent a helping professional.

That the two idioms are in conflict is obvious, and Oakes explores the "antinomies of personal sales." He lists a number of contradictions, including sacralization and manipulation, opportunism and professionalism, and toughness and sensitivity. Each duality is formed by the demands of antagonistic orientations to economic action. The dualities are largely described intellectually, with only brief illustrations from interviews of how they are experienced and managed by sales workers. There is no systematic exploration of the world of sales work and the tensions inherent to it.

The strength of Oakes's book is in his identification of an important contradiction in a significant form of economic action. It is clear in his framing of his discussion in terms of "idioms" and "antinomies" that he is interested in abstracting principles and stating their logically confusing consequences for the people who must work within them. The book is limited to identifying contradictions, however, never really showing how, through the course of a career, agents develop strategies for coping. The too-brief (13-page) chapter on antinomies can hardly discuss the character of the tensions, and the short (15-page) conclusion cannot show how the tensions are felt and accommodated. Indeed, Oakes prefers to keep his analysis at an overly abstracted level. Using Weber's "Science as a Vocation" as an explanatory vehicle, Oakes finds that salespeople, like scientists, face value conflicts. The world of work he was privy to is far too interesting to discuss in such an intellectually aloof manner. I am certain that Oakes has identified important issues, but unfortunately he never shows how those issues have been resolved in the organization and history of the insurance industry and in the daily experiences of insurance agents.

*The Organization of Hypocrisy: Talk, Decisions, and Actions in Organizations.* By Nils Brunsson. New York: John Wiley & Sons, 1989. Pp. viii + 242. \$54.95.

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Nils Brunsson's book is a stimulating attempt at making sense of the complexities of organizational life. The themes of this book (leadership, rationality, politics, legitimacy) will be familiar to students of organizational sociology. Brunsson's attempt to integrate these themes through the construct of hypocrisy is innovative and interesting.

Complex organizations have long been seen by sociologists and organi-

zation theorists as rich in contradictions. Political and apolitical activities coexist, while ends and means are separated. Norms of rationality are noteworthy for the frequency with which they are violated. In spite of the planner's intentions of developing rational plans, planning processes get diverted and produce unintended and irrational consequences. Efforts at theoretically reconciling these contradictions are numerous and noteworthy. Brunsson appears to have been most influenced by scholars in the tradition of James March and Herbert Simon, as well as by such institutional scholars as John Meyer.

Brunsson examines the world of Swedish municipal organizations and finds it chaotic. The rational logic formally espoused by organizations competes with an expedient political logic that dominates the daily activities of decision makers. The author distinguishes talk, decisions, and actions as separate components of the reality that decision makers face in coping with conflicts within themselves and with other actors.

The organizations that Brunsson studies have turbulent environments that often present unsolvable problems to decision makers. In negotiating these environments, organizations face multiple and often conflicting demands from numerous external and internal stakeholders. Under such conditions, it is difficult to see how any collective action ever occurs. This depiction is similar to the "organized anarchy" or "garbage can" model described by March and Johan Olsen (*Ambiguity and Choice in Organizations* [Bergen: Universitetsforlaget, 1976]).

The author goes beyond the garbage can, however, by showing how organizations and their decision makers manage chaos. Rather than despairing of action and calling for playfulness and "foolishness," Brunsson instead elaborates the idea of hypocrisy, by which he means the organizing and managing of discontinuities such that organizational survival and legitimacy are assured, conflicting demands are reconciled to the extent possible, and any possibilities for productive action are exploited.

If talk, decisions, and actions are separated, then each becomes a separate product that can be used independently of the other two. Some stakeholders may require only supportive talk. With others, it may be possible to make decisions on their behalf without the requirement of following them with actions. For others, the inability to meet demands in the present can be offset by promises of supportive decisions and actions in the future, promises that decision makers will not be held accountable for at a later date.

By identifying the management of inconsistency as hypocrisy, Brunsson is not just engaging in rhetoric. In his view, organizations that fail to balance politics and action or reconcile irreconcilable demands will be maladaptive and will not survive. Decision makers who attempt to decide things "rationally" and link decisions and actions will produce inaction and irrationality instead. Trying to avoid politics will increase them. Taking on responsibility directly will reduce one's influence. It is only

by indirectly managing inconsistencies that organizations will survive and prosper.

This use of multiple models for understanding organizations differs from other efforts, such as those of Graham Allison, in that, for Brunsson, the integration of models occurs in practice rather than during analysis. The conflicting demands of action and political models are real, as is the need for managing those demands, even when inconsistency and hypocrisy are required. In his conclusion, Brunsson discusses the morality of intentional inconsistency in dealing with stakeholders.

All of this makes for an intriguing story, although there are some problems with how it is presented. The examples the author provides are long enough to distract from the flow of his argument but not long enough to provide the reader with the same insights that have been obtained by the author. One suspects that the story is not overly burdened by the details of cases. In addition, the cases used are those in which one might expect hypocritical behavior to be most evident. Consequently, the range of applicability of these ideas is suspect.

Brunsson's argument is fragmented throughout the book and does not come together well until the end. The book also contains allusions to works of previous theorists that are not well identified (except in the bibliography) and numerous diversions that are not well developed. Tighter development of the hypocrisy construct would be useful.

This book deserves attention from serious students of organizations as a stimulating alternative view of organizations as they actually are. Brunsson's case will be more persuasive as he specifies the notion of hypocrisy more thoroughly and extends his work to other contexts and different types of organizations.

*Survival of the Sanest: Order and Disorder in a Pre-trial Psychiatric Clinic.* By Robert J. Menzies. Toronto: University of Toronto Press, 1989. Pp. xxii + 310. \$40.00 (cloth); \$18.95 (paper).

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In 1977, the city of Toronto created a psychiatric brief assessment unit (BAU) to provide pretrial evaluations for its criminal courts. The BAU's staff was given the job of determining whether the people who were referred to the unit were fit to stand trial, represented a danger to themselves or others, needed psychiatric treatment, or required further assessment. Robert Menzies' book covers the first year of this unit's full-time operation. It is based on his field observations and his close analysis of staff reports and recommendations. He compares the psychiatric documentation (assessments, progress notes, etc.) with the police reports that bring "patients" into the BAU, and he traces the patients' paper trails

(court actions, police reports, hospital admissions, etc.) over the following two years.

Menzies argues that the main function of the BAU is neither diagnostic nor therapeutic in the ordinary, medical, sense. Its actual function is to provide the police with "an unproblematic resource for removing troublesome people from the streets." The book describes a medical-legal process in which psychiatric experts are "involved in the manufacture of labels, categories, and communications . . . grounded in [their own] occupational and institutional interests, and most particularly their need to present themselves as rational, authoritative, and dependable participants" (p. 12). To this end, the clinical assessments employ "the scientific language of discovery" to restate, recirculate, and legitimize the official characterizations that accompany patients when they first enter the BAU. The people (patients) who are caught in this process are described as being a "recyclable commodity for distribution and consumption" within a network of medical-legal institutions (p. 209).

The book describes the movement of bodies and documents through stages of surveillance and documentation: the initial encounter with the police, an assessment period in the BAU, protracted evaluation in the forensic inpatient unit, the preparation of recommendations to the criminal court, and the final disposition of the case in the courts.

Menzies describes the police as being engaged in a "degradation strategy." Their documents (arrest reports) consist of dramatic narratives that string together and amplify details of deviant and outlandish behavior that are doubtfully connected to the individual's legal problems. These narratives create, for each patient, a pathological essence, an indelibly flawed moral character. By identifying defendants with threatening subcommunities—when suspects are described as "young black males," "Rastafarians," and so on—the police narratives reproduce the "moral panics" that permeate the middle-class consciousness of urban Canadian society. The overall effect is to transform people (patients, suspects, defendants) who are sources of "trouble" into sources of "danger."

Nearly always, the next stage of documentation, that done at the BAU, confirms the police assessment. Throughout the diagnostic process, there is the assumption that the patients' behavior originates in hidden mental processes that are accessible only to psychiatric experts. Effective resistance is impossible. Patients' denials and lack of cooperation are appropriated as evidence of their pathologies. The unit's social workers routinely collect additional accounts of bizarre and deviant behavior from patients' relatives and acquaintances. While confined in the inpatient unit, the patients' behavior and utterances are selectively charted in the unit progress notes and other reports. Here again, the staff is pictured as being hard at work producing documentation to confirm previously established psychiatric labels and global judgments.

Menzies writes that "despite the absence of a clear legal mandate, [BAU] psychiatrists consistently offered opinions about bail, dangerousness, carceral disposition, and other penal issues of paramount impor-

tance to the courts" (p. 235). It is opinions about patients' dangerousness that are said to give the BAU its sweeping mandate. "The eradication of dangerousness from forensic decision-making could well render clinical assessments largely irrelevant to the pragmatic business of producing criminal court dispositions" (p. 187). How accurate are the BAU's assessments? Menzies followed the police and court records of 592 patients over the two years following their discharges from the BAU. He concludes that, at best, there is only weak evidence that these psychiatric experts can accurately predict the dangerousness of particular patients.

This is a provocative book, and Menzies takes great care to set out his evidence and to chart the lines of reasoning that justify his conclusions. His focus is on the production and reproduction of suitable kinds of patients and criminal defendants. The monograph's most significant limitation is that Menzies has relatively little to say about the BAU's staff. Aside from an account of the unit's division of labor and the part that it plays in providing judges with "pseudo-objective" depictions of defendants' pathologies, there is not much discussion of the unit's hierarchy of command and control. Among other things, one would like to learn something about the institutional role played by the psychiatrists, how the unit's personnel are recruited and retained, and what carrots and what sticks explain the staff's collaboration in this process.

*Acceptable Risk? Making Decisions in a Toxic Environment.* By Lee Clarke. Berkeley and Los Angeles: University of California Press, 1989. Pp. xiii + 229. \$28.50.

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Lee Clarke presents a very interesting and highly readable case study of organizational and interorganizational responses to an accident at the Binghamton, New York, State Office Building on February 5, 1981. The accident involved an electrical fire in the building's mechanical room, which led to the release of 180 gallons of coolant containing PCB, and the resulting exposure to toxic contamination (during the immediate cleanup efforts that lasted about three weeks) of at least 482 people. Clarke's analysis is based on newspaper accounts, a wealth of important documents obtained through requests under the Freedom of Information Act, and one or more of each of his own intensive interviews with 31 informants, many of whom were key individual or organizational players in the emergency that followed the accident. The analysis begins with an account of the initial medical surveillance and cleanup efforts. This is followed by a detailing of negotiations related to continuing medical surveillance and planning for the decontamination of the building. The negotiations continued for over eight months, when the study was completed. Clarke's primary conceptual device for interpreting what

happened during the time period of the study involves extending Cohen, March, and Olsen's garbage-can model of decision making to the interorganizational level of analysis.

This is a very good monograph and one that should be of interest to specialists in disaster research, natural and technological hazards studies, and the sociology of risk. The book also has excellent potential as supplemental reading for courses in social problems, environmental sociology, and qualitative methods. The case description is thorough and easy to follow; the methodology is fully detailed at the end of the monograph; and the writing is first-rate throughout. My only minor quibble with the case study itself is that, in the end, we learn a great deal about possible effects of the accident on the Binghamton economy but very little about the actual short-term medical effects on exposed workers. These effects appeared to be substantial, but presumably no one knows the details about them because there was so much trouble beginning and completing the job of medical surveillance.

In the space remaining, I would like to make a few comments about Clarke's use of the garbage-can model of decision making to interpret the medical surveillance effort and the planning for the building's decontamination. Since its creation, the model has provided a descriptively powerful alternative to overly rational conceptions of organizing. In a very practical sense, we get a better fix on how the social world really works by using a garbage can as a metaphor. But the garbage-can model is limited, not only because it neglects power, as Clarke and his mentor Charles Perrow point out, but also (and I think this much more important) because the model includes no real conception of organization itself. It makes no difference whether the level of analysis of this or any other research is organizational or interorganizational. The garbage can (organization) is little more than an inert and leaky container of problems, solutions, participants, and choice opportunities.

It is not surprising that, as Clarke points out, of all the possible players in the emergency response, only three (the county health department, the state health department, and the state office of general services) became central. Their domains were largely guaranteed before the event. Did the other organizations listed really exit the "can," as Clarke claims, or were they never in it for the reasons that he spells out? I think the latter. What is somewhat surprising to me, with my background in natural disaster research, is that the structuring that took place among these three agencies was so tortured and, in the end, not organized in any meaningful sense. But absent an adequate sociological conception of organization itself (the can), we cannot describe the difference between what these agencies were doing and what Clarke thinks they could or, perhaps, should have done.

How can we come up with such a conception? We can do so by exploiting the garbage-can model for what it is—a metaphor of human behavior—and then merging theories of formal organization and collective behavior to capture organizing under conditions of uncertainty. Such



an effort would reveal the commonality of Clarke's special concern, the sociology of risk, and the interests of those studying hazards and disasters. Conventional risk analysis will become more (not less) scientific as a result.

*Drifting Continents and Colliding Paradigms: Perspectives on the Geoscience Revolution.* By John A. Stewart. Bloomington: Indiana University Press, 1990. Pp. xii + 285.

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This monograph by John A. Stewart is an ambitious and important contribution to the new sociology of science. As the title, *Drifting Continents and Colliding Paradigms*, indicates, Stewart has conducted an extensive case study of the emergence in the 1960s of plate tectonics (continental drift) as the dominant paradigm in geophysics. His analysis is based on an unusual and laudatory combination of qualitative and quantitative methods. Stewart has conducted extensive in-depth interviews with many of the field's key participants and read most of its important literature. The three chapters that focus on the science are not too technical to be beyond the grasp of those not familiar with geology but are detailed enough to offer many examples for the sociological analysis Stewart performs in the last part of the book. In addition Stewart has conducted "co-citation" analyses to identify the important papers in the plate tectonics revolution and, what is perhaps most interesting, has made a series of regression analyses showing that the extent to which an article is cited can be explained by "social" or "scientific" factors.

The theory of continental drift was first put forth by the German geologist, Alfred Wegener, in the 1920s. This theory was ignored and rejected by most of the scientific community until the 1960s when, in the course of a few years, it became the dominant paradigm in the discipline. Stewart uses this to pose a series of crucial questions. To what extent does this case support various competing models of scientific development such as those of Popper, Lakatos, Laudan, and Kuhn? How does this case illustrate the way in which the cognitive content of science is influenced by social processes? And can we tell the extent to which the crucial process of consensus formation is influenced by cognitive or social factors?

Stewart concludes that science is not the rational, rule-governed activity depicted in the accounts of the logical positivists. His work offers additional proof for the conclusion that the dichotomy between "facts" and "theories" is a false one because all facts are "theory laden." He gives many examples of how geologists ignored anomalies or data that did not support their hypotheses and searched for data that illustrated their theories. He concludes that his case study corresponds most closely

to the view of science that emerges from Kuhn's classic book, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970). I agree with Stewart that the plate tectonics revolution is a good example of the emergence and dominance of a new paradigm and that in general Kuhn's model of scientific development has been the most fruitful for sociological applications, but I doubt that using case studies of various scientific developments to "test" whose model of science is the best is the most fruitful approach. This is because the activities that we call science do not necessarily have a single development pattern.

Stewart's analysis of the history of plate tectonics leads to the conclusion that decisions that scientists had to make about what to accept as right or wrong were underdetermined by empirical data; that is, the data frequently did not point to only one rationally acceptable solution. Given underdetermination by data, the most important question in the sociology of science today is, How then do scientists reach a consensus? Radical constructivists such as Bruno Latour argue that consensus is purely a result of social processes and that the content of scientific "productions" has no independent effect on whether that production is accepted, rejected, or ignored by the scientific community. Stewart is sympathetic to the constructivist orientation but rejects its more radical versions. He argues that whether new ideas, as presented in journal articles, are accepted (as indicated by citation counts) depends on both the scientific resources and the social resources brought to the article. He classifies a sample of articles by aspects of their content and attributes of their author(s). Regression analysis shows that the former set of variables explains substantially more variance of citations received than does the latter set. But Stewart does not interpret this as evidence against the constructivist position since the scientific resources included in the article, such as references to the plate tectonics literature, may have been previously socially constructed.

Stewart concludes that "'Nature' influences the results of empirical study, but must 'speak through' a socially constructed 'instrument' " (p. 243). Thus, although at any given point in time scientists must deal with communally accepted conventions, their decisions will to some extent be influenced by the empirical data from the natural world as well as by logical arguments, theories, and models. And, by extrapolation, these same "cognitive" factors must have played a role in the development of the received conventions. This approach makes good sense and enables sociologists of science to shift their attention from unanswerable epistemological problems to the type of detailed analyses of how social processes influence scientific decision making that is illustrated by this book.

This innovative analysis is, to my knowledge, the first systematic attempt to measure cognitive and social influences and quantitatively study their interaction to influence the consensus formation process. Like all innovative work, it raises some interesting questions. Consider the variables used to characterize the articles. The variable with the largest beta is the length of the article. Although it is clear that length is a good

predictor, it does not tell us that much, since length alone will not cause an article to be cited. We need to know the intervening variables and measure them more directly. Also, the constructivists would undoubtedly argue that whether an article cites other important work in plate tectonics cannot be considered to be a "scientific" as opposed to a "social" attribute. It may simply indicate that those articles are persuasive that enlist the most influential authorities as allies. Stewart points out the importance of authority in the development of consensus at many points throughout the book.

Another innovative aspect of this book is Stewart's attempt to give clear examples that show how scientists use the same type of analogical reasoning in developing their models as do people in other institutions. Stewart also shows that the type of decision making analyzed by March and Simon in their classic *Organizations* (1958) is followed by scientists. I would have liked to have seen these aspects of Stewart's analysis further developed and look forward to his future work on this topic.

*Making Science Our Own: Public Images of Science, 1910–1945.* By Marcel C. LaFollette. Chicago: University of Chicago Press, 1990. Pp. ix + 260. \$45.00 (cloth); \$17.95 (paper).

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Marcel C. LaFollette had two purposes in writing this book. One was to inform readers about the ways in which science and scientists were portrayed in "mass" magazines from 1910 to 1955. The other was to show how public policy and public opinion about science are related. She succeeds in carrying out the first goal but does not succeed in the second. After presenting a brief summary of the book, I will discuss each of her goals in turn.

The book contains 11 chapters. Chapter 1 gives an overview of the book with the goals and justification for the study. Chapter 2 describes the magazines and why she selected them. Chapter 3 is about the authors of the analyzed articles. Most articles were written by journalists, but some were written by the scientists themselves. Chapters 4 and 5 are about the scientists, both men and women. The remainder of the book is about "science"—how it works, what it is, and how public images of it affect policy and opinion. In addition to the text, the book also includes pictures, incomplete reprints of several articles from the magazines, and a few tables.

To carry out her first goal, LaFollette analyzed the content of 11 magazines published from 1910 through 1955. She wanted to know what changes occurred over the decades, both in how science was portrayed and how these images related to public policy concerning the support of science as a civic undertaking. She picked the period because, at the

beginning of the century, scientific research was primarily a private matter, but, through the decades and especially following the two world wars, science was transformed into a shared enterprise between government and industry.

The content analysis itself is presented in historical and cultural contexts. Her quantitative data are somewhat simplistic, but the qualitative analysis is rich in examples and comparisons. She is clear that 20th-century mass media presented not one public image of science, but many. She asserts that the term science had many meanings. It was used in the magazines to refer to the research process, the body of knowledge, and the professional community of scientists.

Even though she is insightful and detailed about the magazine content, she is somewhat naive when she considers how the content affects the audiences. Throughout the book and especially in the first and last chapters, she makes unwarranted connections between public policy, public opinion, and magazine content.

To make her point about the relationship between public opinion and media content, she presents the debate over federal research funding of science that followed World War II. One side of the debate advocated lifting wartime controls and granting autonomy to the organized scientific community. The other advocated continued government control. The first position was articulated in a report that Vannevar Bush (director of the wartime Office of Scientific Research and Development) and his committees submitted to the president. The second position was advanced by a group of White House advisors. Ultimately the Bush position won (at least temporarily). According to LaFollette, the model prevailed because it embodied the prevalent cultural images of science, as presented in the media. According to her analysis, the content of the magazines represented the failure of "both the journalists *and* their audiences to question science and scientists" (p. 172; *italics in text*).

This faith, as measured by public opinion polls, declined during the 1950s. Her explanation for the decline is exactly the opposite of her explanation for the earlier trust. Both audiences and government officials lost trust in scientists and science, not because the media presented negative images of scientists and science, but because of the actual negative effects of research itself. The realization that science was not going to save us and in fact may destroy us, led to the adoption of more restrictions and regulations by the government in the 1960s. She suggests that the uses and limitation of science justify the increased restrictions.

LaFollette repeats throughout that scientists are not politically independent, because they receive some of their support and education from the government. Yet, in spite of their dependence on public support, scientists have presented a public image that promotes political deference. Journalists, too, have adopted this image and held back criticism.

Overall I found the content analysis informative but the policy discussion incoherent. On the one hand, the author tries to show that we have become slaves to science and, on the other, she shows how public opinion

polls suggest otherwise. In her conclusion she advocates a new journalism about science, one that will alert the audience to the moral, economic, and political implications of research. I hope that she will explain in a future work how to bring about the journalism she recommends.

*A Protestant Legacy: Attitudes to Death and Illness among Older Aberdonians.* By Rory Williams. New York: Oxford University Press, 1990. Pp. xi+371. \$68.00.

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Rory Williams's *A Protestant Legacy* is a welcome addition to a new generation of sociological studies of dying. Because its research site is in Protestant Aberdeen, Scotland, it serves superbly as a contrast to Lindsay Prior's study, *The Social Organization of Death* (New York: St. Martin's Press, 1989), which was conducted in the Catholic city of Belfast, Ireland. I hope that these largely ethnographic studies will be followed by more studies in contrasting cultures.

The book argues that "contemporary attitudes to dying appear as historical strata laid down by a culture in motion" (p. 121). While all students of death and dying would accept the dictum that "attitudes of the living to the dead vary according to culture" (p. 88), surprisingly few studies have attended to the dynamics of culture.

*A Protestant Legacy* may well set a model for such studies. While drawing upon the monumental account by Phillipe Aries of changes in beliefs about death from the Middle Ages to the present, the author relies specifically on "Aberdonian talk" to reveal the varying historical strata (p. 90). Seventy men and women over the age of 60 were intensively interviewed, and interviews with a random sample of 619 persons of the same ages were added to the mix and used as controls. The methodology is interesting. Williams is at great pains to transcend traditional historical methods and anthropological analysis by relying on confirmed qualitative data. In doing so, he relies on "cumulative comparisons" that are neither simply generalizations put together by the researcher to reveal cultural consensus nor artificially constructed ideal types (p. 20).

The volume is divided into two parts. The first part, "Patterns of Coping," details the Aberdonian experience with such problems as illness, old age, dying, bereavement, and "the doctor." I did not find the lack of logic in the order of these unduly disturbing. Illness is discussed both as a "test" of one's devotion to activity, and as a "legitimate disengagement" (p. 53). This is certainly no new sociological paradox; what is new is the historical and cultural contexts within which the author writes. Nor would it surprise any sociologist to learn that Aberdonians, despite their respect for "perseverance and thrift," often regard retirement as a "liberation" (p. 82). Similarly, in the discussion of be-

reavement, the argument bristles with historical data ranging from the use of ritual to psychotherapeutic treatments. It is the treatment of dying and the role of the doctor that will probably attract greater sociological attention. If I am correct in predicting a new body of sociological research concerned with dying, chapters 3 and 5 are likely to become standard sources in it. They focus on precisely the pertinent issues: control of the timing of death and awareness of its imminence. One illustration makes the point. In Scotland the negative response to medical heroism took shape much earlier than in the United States, whereas, in respect to the awareness issue, Scottish doctors have been far less radical than the Americans.

Part 2 of the book, "Formative Influences," offers a rich source of ethnographic, historical, and cultural data designed to illuminate the main topical strands of part 1. Sociologists may find the chapters devoted to morality, work, wealth, and religion somewhat less compelling than chapter 10, which, if carefully read, brings all the influences together. This synthesis will almost certainly be rewarding, if, perhaps, sometimes frustrating.

In that chapter, "A Protestant Legacy," the author attempts to explicate the cultural "strata" that his Aberdonian data have revealed. How, for example, can he explain the Aberdonian conception of a "good" death as one that is "unaware, swift and in old age" (p. 328)? In attempting to answer such questions his reasoning is complex and often tortured, but nonetheless interesting and intricately documented. It seems to come down to this: all of the Aberdonian belief systems are shaped, directly or indirectly, by a work ethic that is "always further shaped either by a typically activist self-image or by ethical or religious convictions deriving mainly from the Protestant tradition" (p. 316). Sophisticated Weberians may be prompted to check the author's use of Weber's "elective affinities" in this context, a task that I, at least for the moment, choose to postpone.

*A Protestant Legacy*, despite some minor flaws, a few omissions, and a number of understandably unanswered questions, more than lives up to its promise. It is a consistent, painstaking, and often brilliant study of "culture in motion."

*Jealousy: The Evolution of an Emotion in American History.* By Peter N. Stearns. New York: New York University Press, 1989. Pp. xiv + 225. \$30.00.

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Why do few Americans regard their own jealousy as a problem, even though the emotion is a major factor in disputes and violence during courtship and marriage? This apparent paradox has social origins that are

the focus of an important book, *Jealousy: The Evolution of an Emotion in American History*, by social historian Peter N. Stearns. Relying on such data sources as advice manuals, legal cases, and personal diaries and letters, Stearns traces the course of our changing ideas about jealousy and our actual experience of the emotion. He defines jealousy broadly in various social relationships of adult romance, childhood sibling competition, and close same-sex friendships of any age.

The book's core is a periodization of jealousy standards and experience, focusing on social forces that caused change between periods. In traditional America and Europe before 1800, displays of jealousy were rare. The tightly knit community prevented most behavior that could provoke jealousy. Courtship was supervised by parents or even arranged by them. Marital infidelity was infrequent. Because jealousy was aroused only rarely, the culture did not emphasize explicit rules to constrain jealous expression.

In the following Victorian period, cultural disapproval of jealousy rose. The institutional arrangements that had minimized jealousy weakened. Greater freedom in courtship caused jealous rivalries and bitter disappointments. Adultery increased under the weaker community scrutiny. Stearns contends that the more frequent provocation of jealousy required society to suppress the emotion more strictly. The new view of the family as a harmonious refuge from industrial turmoil also induced tighter controls against jealous outbursts. Jealousy became a sign of selfishness and possessiveness. These character defects were seen as incompatible with real love, which should rest upon complete trust in one's partner and upon voluntary attraction, not possession.

The 20th century brought intensified control over jealousy. Whereas Victorians had relied on sensitivity and consideration to avoid arousing jealousy, the newer period demanded self-control by the jealous person, even when strongly provoked. Circumstances that could arouse jealousy increased. For example, men witnessed the greater participation of women outside the home, and the new custom of dating brought about peer popularity contests. In both new social patterns, flirtation and sexuality were overt. Norms proscribing jealousy became more explicit. In the Victorian era, a jealous display might elicit expressions of concern and sensitivity from one's partner, but the more modern partner would now defy one's jealousy by withdrawing from the setting or relationship or through further assertion of autonomy. The latter half of our century has seen experiments in jealousy-free open marriage and "swinging" spouse exchanges for sex.

This book's greatest strength is the rich, complex vision with which Stearns connects jealous expressions and feelings with cultural standards and societal institutions. Thus he partly attributes the heightened jealousy restraints to the increased value placed on individual autonomy, pleasure seeking, and sexual satisfaction. He also detects a tighter control across emotions generally, in line with new personality goals aimed at cool behavior, suitable for bureaucratic and service occupations. The

book's wide brushstrokes also portray the gender typing of jealousy. Traditional communities linked jealousy with the patriarchal defense of property and honor, until the Victorians reinterpreted the emotion as reflecting feminine dependency and sensitivity. Finally, the later 20th century defined jealousy as inappropriate for either sex.

Stearns's book offers sociologists an excellent model for analyzing the historical construction of an emotion. Interdisciplinary work is risky, however, and sociologists may question the Freudian and functionalist theories that he implicitly employs. For example, he argues that in socializing their children about jealousy, parents "project" their own anxieties about the emotion. And in explaining that increased provocation of jealousy led to tighter controls over expression, Stearns does not explain what disastrous consequences might ensue from open expression of intense jealousy, nor even what people *believed* might occur.

These shortcomings are far outweighed by the book's insightful contributions, of which three stand out. First, the author recognizes the strains between normative standards and personal experience of jealousy. This discrepancy between precept and feeling is itself an important variable, fluctuating over time. Narratives from letters and diaries depict this struggle for socially appropriate emotion, against a background of shifting levels of jealousy provocation.

A second highlight of the book arises from the historian's cautious attention to detail. Finding no simple pattern or unilinear trend, Stearns describes the complexity among different ideas and norms. New standards conflict with old ones but also build upon their residues in transitional periods. Parents' own socialization and experiences with jealousy may contradict their children's knowledge of jealousy in an emotional generation gap. Regional variations in jealousy are described, such as those in the aristocratic Old South, whose honor code and chivalric tradition spurred more intense jealousy.

Finally, Stearns identifies the interaction across social institutions. While parents sought to minimize sibling rivalry at home, schools adjusted more slowly to reduce the competitive envy aroused by practices such as posting student grades. Jealousy trends in marriage mirrored the decline of jealousy as a legal defense, which Stearns examines in court cases of crimes of passion. In studying an emotion, sociologists should emulate this comparison of work, family, school, law, and religion. This book is recommended strongly not only to sociologists of emotion, but also to scholars interested in the family, gender, socialization, and social psychology.



*Conflict Talk: Sociolinguistic Investigations of Arguments in Conversations*. Edited by Allen D. Grimshaw. New York: Cambridge University Press, 1990. Pp. x + 356. \$59.50 (cloth); \$17.95 (paper).

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Despite the traditional and venerable place that conflict occupies in sociological theory, studies of actual contentious processes are very recent. Moreover, such studies are most prominent among an interdisciplinary crew of scholars who are not necessarily interested in conflict per se, but rather in mapping the terrain of the interaction order and whose tape-recorded forays into the world of everyday life find disagreement, argument, and other kinds of strife to be ubiquitous. In *Conflict Talk*, Allen Grimshaw has assembled an impressive array of this research.

Social conflict, when closely examined, is no doubt a complex phenomenon. For example, consider a group of boys who are preparing for a slingshot battle. In one of the book's selections, M. Goodwin and C. Goodwin show that a brief 14-utterance exchange among such boys is replete with highly consequential issues that must be resolved on the spot. These include who is eligible to play and, if he is eligible, what team he belongs to, what the hierarchy among team members is to be, and what other relationships are relevant (for instance, whether the same parties are to regard one another as "opposite team members" or "brothers"). Nothing short of childhood (and perhaps more encompassing) careers is in motion, and nothing less than a local social organization is at stake.

To say that something is complex can often be an excuse for providing endless description of seemingly minor social happenings. It would be tempting to regard the chapters in *Conflict Talk* this way, because they are primarily case studies and deal with very few instances of conflict. However, these chapters demonstrate that it is in the very details of such episodes that pattern and organization are to be found. Single instances, properly analyzed, provide for an understanding of social structure, not only that which is embedded in the here-and-now of real-time concerted activity but also in longer lasting forms of group organization. Thus, T. Labov examines three narratives about interracial conflict among the members of a food cooperative. She shows how whites who are otherwise liberal can experience situational strife with blacks, respond in forceful and exclusionary ways, and yet formulate the trouble in narratives about what happened so as to maintain an ideology of egalitarianism within the co-op. In an investigation that uses an unusual source of materials—the film of a psychiatric interview from Frederic Wiseman's *Titicut Follies*—H. Mehan reveals how the involved psychiatrist and patient both engage in "oracular reasoning," or denying and repelling evidence that is contrary to each one's own system of beliefs. While doctor and

patient indeed have competing definitions of the situation, Mehan argues that these definitions are not equal, and the conflict is resolved, as we might expect, in favor of the psychiatric point of view. In the realm of labor-management negotiations, K. C'Donnell is also concerned with an asymmetry between the parties, which is accomplished partly through linguistic and prosodic channels of speech. Thus, as power is deployed to resolve conflict, it is manifest in talk that reproduces the surrounding institutional context.

In her study, O'Donnell compares asymmetric negotiations with bargaining between labor and management that involves more harmony and less social distance. That parties can take oppositional stances and still manage to cooperate is a theme that D. Schiffrin also pursues in a lovely chapter about the use of opinions and stories during argument. When parties present opinions, they allow facts to be disputed but not their own regard for those facts; when parties introduce stories, they indirectly solicit sympathetic support for a controversial position. An upshot of the O'Donnell and Schiffrin articles is a Simmelian point. Conflict does not necessarily diminish social relationships; it can be a source for or a type of solidarity as well.

When conflict is a manifestation of social rupture, however, the parties can end up in court. Appropriately, two chapters in *Conflict Talk* deal with courtroom language. In one, S. Phillips explores vocalizations of judges, which often consist of informing defendants of their rights, accepting a guilty plea, or handing down a sentence. In hearing motions, however, the judge can take a combative role, offering positions on what evidence should be excluded, on what the relevant conditions of a defendant's release are, and on other matters. In these conflictive situations, judge's talk is similar to that of lawyers. In another chapter on the court, J. Conley and W. O'Barr discuss litigants' modes of presentation in small-claims court. Some litigants introduce logical, "rule-oriented" accounts, while others provide "relational" tales that portray a dense web of expectations and obligations between the parties. In terms of success, rule-oriented accounts, whose use seems to correlate with exposure to "social power" (such as business and legal training) fare much better. Moreover, Conley and O'Barr suggest, such exposure is distributed according to gender, class, and ethnicity.

Although this book is mostly a collection of case studies, there are several chapters that analyze large numbers of disputes and provide distributional and comparative information. Attempting to redress a previous research emphasis on ritual exchanges among males, D. Eder examines conflict in female adolescent peer groups and reports that ritual insults and other complex argumentative skills are prominent, although they may be less competitively employed than in boys' groups. Moreover, females may exert more effort and thus may be more adept at resolution than boys. Similarities and differences in the disputes of American and Italian children is the topic of a chapter by W. Corsaro and T. Rizzo. Of their many fascinating findings, two stand out. Italian children argue

more than their American counterparts, and they also engage more stylized and complex oppositional routines as a kind of social activity with its own dynamics and purposes.

Where theorists of conflict often implicitly or explicitly emphasize the need for resolution as a means whereby regular social relationships can be maintained, the studies in *Conflict Talk* remind us how rare it is for participants to terminate oppositional stances. Given our adult prejudices, this may not be surprising to find in children's disputes, but it is equally true for adults. Indeed, if S. Vuchinich's analysis of closing phases in family arguments is correct, members probably live their daily lives with large amounts of unresolved conflict lurking beneath their relationships. In an intriguing examination of fictional and dramatic portrayals of how people use silences to manage dissension, D. Tannen shows why this may be the case. Sometimes contrariety is too difficult to speak, and talk about other things can effectively handle the pain of dissension, even if it does not deal with its source.

In the introduction, Grimshaw provides a compelling rationale for investigating conflict, while his conclusion works to integrate the varied studies conceptually and theoretically. Whether they lend themselves to testable hypothesizing, or represent, in a fashion more like that of Goffman, relatively isolated explorations of society's niches, remains to be seen. In the meantime, this book offers satisfying inquiries on an intriguing topic, an unusually consistent high level of quality, and, thus, an overall good read.

*Rules versus Relationships: The Ethnography of Legal Discourse.* By John M. Conley and William M. O'Barr. Chicago: University of Chicago Press, 1990. Pp. xiv + 222. \$34.00 (cloth); \$14.95 (paper).

*Getting Justice and Getting Even: Legal Consciousness among Working-Class Americans.* By Sally Engle Merry. Chicago: University of Chicago Press, 1990. Pp. x + 227. \$50.00 (cloth); \$19.95 (paper).

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The intellectual ferment unleashed by "blurred genres" has spread to the anthropology of law, as attested by these two studies of the consciousness gap between litigants and practitioners in lower courts of the United States. This ferment, of course, entails at once promise and pitfall, which these books illustrate as well.

Although emerging from different research groups, these works share a common lineage. Published on the same day, they help inaugurate a series entitled *Law and Legal Discourse*, edited by William M. O'Barr and John M. Conley, codirectors of the Duke/North Carolina Law and Language Project and joint authors of *Rules versus Relationships*. Sally

Engle Merry, author of *Getting Justice and Getting Even*, is a member of the Amherst Seminar on Legal Ideology and Legal Process. It is clear from the books' acknowledgements that the various authors are aware of each other's work.

Both these works seek, through discourse analysis, to broaden the conceptual framework of legal anthropology. Conley and O'Barr replace the traditional focus on legal *cases* with a focus instead on *encounters* with the legal system, in order to consider litigants' interactions occurring outside actual trials. They practice a method they term the "ethnography of discourse," which treats language as the object—rather than merely the instrument—of analysis. Thus, they insist on examining accounts only in their verbatim form. In short, they advocate "learning to listen" to the voices of litigants who have customarily been ignored. They study processes of accord as well as conflict. Their critique of methods conventionally used in legal anthropology represents the greatest contribution of their study.

Merry similarly rejects the legal anthropologists' traditional narrow focus on *disputes*, since "the concept of dispute is inadequate for understanding the complex processes of interpretation which constitute conflict interactions" (p. 91). Rather, she joins the analysis of disputing with the analysis of law as ideology. To this end, she replaces the *analytic* category of "disputes" with the *folk* categories of "problems" and "cases." This methodological innovation is useful. For reasons that elude me, however, she also declares that her material "slips out of the conventional categories of anthropological research: the community, the institution, the family" (p. 4). The failure to integrate fully her discourse analysis with these conventional categories represents, I think, a serious (and all too common) methodological pitfall.

Both works chronicle the frustrations of ordinary citizens as they experience informal justice. Conley and O'Barr observe that although most lay litigants profess a "relational" orientation to the law, emphasizing "personal values, social relations, and broad conceptions of fairness and equity" (p. 1), most judges employ instead a legalistic "rules" orientation that claims to transcend differences in personal and social status. "For this reason, lay people and legal professionals often hear each other as speaking different languages" (p. 173). Conley and O'Barr claim that this communication gap is fundamentally more frustrating to users of legal services than either legal expense or court delay.

Merry similarly emphasizes the tensions between the alternative ways of interpreting conflict situations as either problems or cases. Problems are more inchoate, growing out of social relationships in families and in neighborhoods, and leading "not to settlement but to a restructuring of the relationship" (p. 88); cases have a more determinate structure, originating in charges and channeled to disposition by court process. Only reluctantly do people submit to various lower courts their problems with neighbors, spouses, lovers, or children; they do so as a desperate last resort, as an alternative to violence, to escape from relations that

have deteriorated beyond repair. Yet they do so with a sense of entitlement to legal services, as a result of the legal rights movement of the 1960s and 1970s. Averse court professionals, however, try to delegatize these problems, which they regard as "matter out of place," by recasting them in a moral or therapeutic discourse and referring them to mediation. Thus, while Conley and O'Barr find it frustrating for litigants that judges fail to acknowledge the personal and relational dimensions of legally contested problems, Merry finds it frustrating for litigants that judges overemphasize those very dimensions. Experienced litigants learn to resist the "domination" of court workers' moral and therapeutic discourses, by mastering legal discourse in their assertion of new complaints. "This is the paradox of going to court: freedom from the control of community comes at the price of domination by the state, in the form of the courts. . . . The use of the law challenges existing social hierarchies, but the discourses of the courthouse continue to constrain and restrict the way these problems are understood" (p. 181).

I find this conclusion anomalous with Merry's data. Her analysis conveys quite affecting the pathos of working-class life; the problems that people litigate involve serious threats to their identities. She makes clear the communal, institutional, and societal realities that make those identities so precarious. Yet she does not systematically articulate her discourse analysis of court process with those same social contexts. She adopts Foucault's conception of discourse as an instrument of domination, even though her own observations describe a pattern of *evasion* by court agents rather than *oppression*. Thus Foucault's conception is grafted onto her data rather than grounded in them; she postulates an "intrusive" state but documents an ineffectual one. Above all, to me, her data suggest the courts' inability to compensate for the lack of institutional and communal supports that litigants need to secure their identities. Merry emphasizes that courts disappoint litigants, but the courts alone cannot grant the personal autonomy that litigants seek. Her discourse analysis advances the study of conflict, by emphasizing the *cultural* dimensions of conflict situations that process-oriented specialists in dispute resolution tend to ignore (see her important review essay, "Disputing without Culture" [*Harvard Law Review* 100:2057-73]). Ultimately, however, her approach does not expand the narrowly *situational* focus of that specialty.

Despite the promise of its programmatic introduction, Conley and O'Barr's study is disappointing in its execution. Among the 14 judges they study, Conley and O'Barr discern five different types of decision making that articulate variably with the rules or relational orientations of litigants. They find that, regardless of outcome, relationally oriented litigants experience satisfaction from hearings in which judges allow them to express their values and beliefs. But this study represents not so much a new form of discourse analysis as an example of thin ethnography. The data gathered are scant, and the core categories are indiscriminating. Conley and O'Barr studied transcripts of about 150 informal court hear-

ings selected from 36 days of observation and 12 additional days of taping in six different cities; in 19 of these cases, the authors were able to interview litigants when they first filed their complaints and later, after the hearings. In a methodological appendix, Conley and O'Barr claim that they cannot begin to quantify their findings because "the rules-relations continuum . . . lacks consistent and reliable indicators" (p. 182). With respect to a sample text, they illustrate unresolvable ambiguity: "Is Sherman a rule-oriented litigant who adds a relational afterthought to his case, or is he a fundamentally relational person who puts a rule-oriented gloss on his presentation?" (p. 184). This appendix fails to convince me that their concepts are too subtle to be operationalized; rather, to put it in Anselm Strauss's terms (*Qualitative Analysis for Social Scientists* [Cambridge: Cambridge University Press, 1987]), I suspect they failed to do the axial and selective coding necessary to discover truly useful core categories.

*The Conceptual Practices of Power: A Feminist Sociology of Knowledge.* By Dorothy E. Smith. Boston: Northeastern University Press, 1990. Pp. x + 235. \$30.00.

Patricia Hill Collins  
*University of Cincinnati*

"If sociology cannot avoid being situated," claims sociological theorist Dorothy Smith, "then it should take that as its beginning and build it into its methodological and theoretical strategies" (p. 22). Resting on this assumption, *The Conceptual Practices of Power* analyzes how structures of ruling in contemporary societies frame sociological discourse and how that discourse in turn is integral to relations of ruling.

Smith approaches her goal of examining how sociological practices of thinking and writing convert people's concrete experiences as subjects into objectified knowledge by first summarizing how women's experiences produce a critical standpoint on ruling discourses. In chapter 1, "Women's Experience as a Radical Critique of Sociology," Smith examines how sociology remains incapable of analyzing its relations to its conditions because its procedures objectify and separate people from their knowledge.

Smith asserts that alternative sociological theorizing is needed and develops its contours by offering alternative methodological and theoretical strategies. In chapter 2, "The Ideological Practice of Sociology," Smith examines how sociological thinking objectifies experience. "To begin with the theoretical formulations of the discipline and to construe the actualities of people's activities as expressions of the already given is to generate ideology, not knowledge" (p. 48), maintains Smith. Ideology is not a body of ideas or concepts but is rather a method of reasoning whereby the practices of actual people are converted into a time-

less, dislocated space of mere language, labeled "knowledge" or ideology.

In chapter 3, "The Social Organization of Textual Reality," Smith investigates the social organization of knowledge. Smith asserts that sociological discourse obliterates lived experience by developing an astute analysis of how this actually happens. "Texts" or sociological writings constitute the artifacts of the social organization of knowledge for analysis. But the method of textual deconstruction Smith proposes is unlike the timeless, ahistoric approach of some postmodernist analyses, in that Smith advocates examining the connections between texts and relations of ruling. Her discussions of "facticity" and "textual time" are especially ground-breaking in this regard. Facts are neither the statements themselves nor the actualities to which the statements refer. Instead, facts are an organization of practices of inscribing an actuality into a text so that we learn to see the actuality in terms of the so-called facts. "The moment of entering textual time," contends Smith, "is that crucial point at which much if not every trace of what has gone into the making of that account is obliterated and what remains is only the text, which aims at being read as 'what actually happened/what is' " (p. 79).

Chapter 4, "Textual Realities, Ruling, and the Suppression of Disjuncture," examines how the underlying relations of ruling determine facticity or the "factual surfaces" of texts. By investigating the disjuncture between the lived experiences of subjects and how their case histories are constructed by those in positions of authority, Smith illuminates the connections between texts and power. Ideological discourses such as sociology protect the ruling apparatus from the disjunctures between people's lived actualities and ideological representations of the world produced by ruling structures.

Chapters 5–7 provide examples of how sociological analyses of the social organization of knowledge might be conducted. By examining the textual reality of statistical data used in measuring so-called mental illness, analyzing how individuals who write case reports on those seeking psychiatric services construct the facticity of mental illness, and offering a detailed analysis of one text's treatment of one woman's death, Smith illustrates an alternative sociology of knowledge.

One interesting feature of the book is the distinction Smith makes between standard sociology of knowledge and her social organization-of-knowledge approach. By assessing an author's statements to unearth the social factors that allegedly bias assertions made, traditional sociology of knowledge focuses on the social determinations of knowledge. "We can in effect forget about the thinker and move directly from the statements to the interests or perspectives identified with that life situation, into which the thinker is collapsed," observes Smith. "The presence of the subject is redundant, needed only as a vehicle for the causal nexus" (p. 39). The primary emphasis is on knowledge as a codified representation of social "interests." Individuals as fully human subjects remain secondary.

In contrast, Smith suggests that we situate knowers in the center of socially organized knowledge in order to study its contours better. Given this stance, one curious feature of this book concerns its treatment of gender, in general, and its portrayal of women as situated knowers, in particular. Even though Smith subtitles her book "A Feminist Sociology of Knowledge," feminist theory in general and gender in particular are noticeably muted as major themes in the book. After Smith's initial claims that women's standpoint can inform an alternative sociology, women as specific situated knowers drop from the analysis. Even though the standpoint of women is clearly the stimulus for Smith's own work, questions concerning the contributions of women's experiences and feminism remain unanswered.

*Inquiry and Change: The Troubled Attempt to Understand and Shape Society.* By Charles E. Lindblom. New Haven, Conn.: Yale University Press; New York: Russell Sage Foundation, 1990. Pp. xii + 314. \$29.95.

Peter Wagner

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In recent years, many analyses emphasize that the institutions of contemporary society are quite different from how standard accounts in social science tend to portray them. Policy-making, as it really is, is no rational process of organized decision making on the basis of coherent rules of law, democracy, and administration, but a constant process of mutual adjustment among a variety of more or less legitimized, persuasive, and powerful actors. Science, including social science, as it really is, is not the impartial pursuit of some dignified search for valid knowledge, but rather consists of bargains, negotiations, and power struggles much like anything else in the social world. In some of these views, the end of politics and the end of social science have been reached, and we are about to enter the new era of postmodernity, an era in need of new concepts, including, first of all, a rethinking of the double notion of power and knowledge.

Charles Lindblom's most recent book, *Inquiry and Change*, is about power and knowledge in contemporary societies, and it takes, without ever using the term, the postmodernist perspective seriously. Over entire sections, the author engages in a lengthy argument against any grand claims of social science to explain and better the world and against the ingenuous view that enlightened, rational policymakers at the top of centralized institutions are the key to solving social problems. Lindblom launches strong attacks against the complacent mainstream in both politics and social science and challenges most of the assumptions on which



present interactions between policymakers and social scientists are built. At the same time, however, he is clearly unwilling to abandon the idea that inquiry into social problems can be useful, and he would not subscribe to the assertion that the reality of society itself is in doubt, as do many theorists of postmodernity. In this uncomfortable position between uninspired complacency and fashionable critique, Charles Lindblom comes up with a fascinating proposal for the analysis of a key aspect of contemporary society.

An outstanding characteristic of the book is its mixture of conceptual sobriety and radicalism. The analysis does not begin with any grand theorem on the "knowledge society" or the "information society" but, instead, with a careful, even slow, elaboration of questions and concepts. This is a four-step process: Lindblom asks, first, how people come to know what they want; second, what might hinder them from knowing what they want; third, how social science plays a part in enabling or constraining people from finding out about their wants; and fourth, how a new understanding of society as self-guiding rather than scientifically steered could reduce impairments in the formation of wants, not least through a strengthening of the enabling role of social science.

In the first part, the concepts of preference, knowledge, and science are abandoned in favor of those of volition, inquiry, and probing. Thereby, Lindblom opens up some barren reifications and theoretical dead ends, of which there are an abundance in social science. Repeatedly denying any theoretical ambitions, he develops a social theorizing that focuses on the human practices of interaction and communication as a basis for his subsequent argument. The second part is nothing less than the sketch of an elite theory of social communication focusing on the idea of impairment to probing as a social limit to inquiry. This is a powerful contemporary critique of that kind of pluralism that tends to mistake theory for reality. The third part is an exercise in sociology of knowledge that tries to relate the activities of social scientists back to the society in which they take place and on which they necessarily draw. The fourth part provides a skeptically optimistic vision of a future society. The most significant feature of this vision is put as follows: "In this cold universe, the only blueprint for utopia or any human betterment is what human beings themselves draw, and the path ahead may be longer than the path already walked" (p. 28).

Impressive as it is, Lindblom's book is not without open questions (as he himself would be more than willing to concede). I shall name some. His aversion to institutional issues is well justified for prescription, but his critique of social science, for instance, could have gained much from historical-institutional considerations. The impressive range of sources on which he draws may occasionally obscure the problematic character of some references to just those types of social science he so effectively criticizes. And the cautious approach Lindblom chooses for his own argument is in some danger of inviting theoretical asceticism. If his implicit

theorizing were made more explicit, it could more openly encourage the kind of fruitful debate across disciplinary boundaries of which this book itself is an outstanding example.

All this is asking too much, I know, of a book which, as it stands, already makes a complex and provocative argument in a highly sophisticated way. I hope that the many interlinkages that *Inquiry and Change* establishes among political analysis, sociology of knowledge, and the sciences, the sociological study of inequality, social theory, and philosophy of the social sciences may continue to be explored in such a knowledgeable and enlightened way.

*Postindustrial Possibilities: A Critique of Economic Discourse.* By Fred Block. Berkeley and Los Angeles: University of California Press, 1990. Pp. x + 227. \$35.00 (cloth); \$12.95 (paper).

Richard Swedberg  
*Stockholm University, Sweden*

*Postindustrial Possibilities* is a fun and interesting book that many sociologists will enjoy reading. Its basic argument is that, although today's society is becoming increasingly postindustrial in nature, social theory has failed to keep up with this development. In constructing categories that better capture what is currently going on in the economy, economic sociology is absolutely indispensable. Fred Block exemplifies this in a detailed discussion of our current notions of the market, labor, capital, and output. Social theorizing about the economy in postindustrial society, he concludes, has to be centered around qualitative economic growth.

In the opening chapter, Block complains that practically no theorists of stature are interested in capturing the nature of contemporary society. The social theories that dominated the scene until the 1960s and the 1970s—structural-functionalism in sociology, pluralism in political theory, and liberal Keynesianism in economics—have lost their hegemonic power, and, since the 1980s, economic liberalism has tried to fill the void. Economic theory, however, cannot make sense of the postindustrial world for us. There are three trends in particular, Block says, that make it clear that we are outgrowing industrial society and old social theories: the growing importance of services in the economy, the emergence of computer-based automation, and the decline of patriarchy.

Chapter 2 is entitled "Economic Sociology," and Block argues here that we need a new type of economic analysis to make sense of the postindustrial world. Neoclassical economics is severely criticized on two grounds—that it has always failed to capture the reality of industrial society and that it is even less suited to handle the reality of postindustrial society. Economic sociology, especially Karl Polanyi's version of it, must replace the neoclassical. In particular, Polanyi realized that economic

reality is constituted by what happens on three levels: that of microeconomic choice (or the market), that of state actions, and that of social regulation. Any successful economy, Block emphasizes, is the result of a complex interaction of all three levels.

The main bulk of *Postindustrial Possibilities* is, however, devoted to showing what is wrong with the current concepts of the market, labor, capital, and output. Block is very critical of those who think that the market can solve all problems. According to him, we should instead realize that no market is a pure market—if it were, it would quickly self-destruct—as Polanyi has pointed out. Most markets take many other aspects than price into account. Indeed, if we compare the United States of 1850 with that of 1950, the author says, we cannot unequivocally say that the latter was more market-oriented than the former. The effect of the market on economic life in 19th-century America was tempered by a series of factors, such as religion, the family, the centrality of agriculture, and household production. By the mid-20th century, many of these had disappeared or been weakened. But by this time, there were some new factors, which helped to modify the effect of the market: the huge corporation (e.g., by selling through brand names), the professions (e.g., by insuring the quality of certain services), and the public sector (e.g., by having to operate without the help of prices in many cases).

Our current concept of labor, Block argues, is outmoded, since we do not take qualitative and social dimensions of work into account. By drawing on statistics from the *Dictionary of Occupational Titles*, Block carefully shows how the average skill level of most employees actually increased from 1970 to 1987 in the United States. The chapter on labor also contains a good discussion of how today's kind of automation is different from yesterday's and how numerically controlled machine tools, robots, and flexible manufacturing systems are changing the workplace.

The main goal in the discussion of capital is to show that Marx was right when he said that capital is a social relationship and not a physical object. Block holds up to ridicule what he calls "the intravenous model of capital investment": inject some capital into the veins of the economy and everything will start moving. But this is not how things happen in reality. Once we realize, Block says, that capital has more to do with organizational variables than with lump sums of money and inanimate objects, we also understand that there is no good reason why shareholders should have as much power over the corporations as they do today.

The GNP in Block's book might equally well stand for the Grand National Phantasy. He severely criticizes the conventional measure of national output by showing how it both excludes and underestimates what is being produced in postindustrial society. Drawing on some of Christopher Jencks's recent work, Block also points out that during the 1970s people were actually much better-off in reality than according to the official GNP figures. That Block's work constitutes a fine contribution to what Paul Starr has called "the sociology of statistics" is particu-

larly clear from this chapter (see Paul Starr, "The Sociology of Official Statistics," pp. 7–58 in *The Politics of Numbers*, edited by William Alonso and Paul Starr [New York: Russell Sage, 1987]).

In the concluding chapter, Block emphasizes that what characterizes postindustrial society is *qualitative economic growth*. To the extent that this is already happening, the author refers to this phenomenon as "Qualitative Growth I." There is also a "Qualitative Growth II"—roughly the kind of qualitative growth that would become possible if we changed society's institutions to better fit postindustrial society. It is clear that Block's own political ideals are very close to what he calls "Qualitative Growth II." The last sentence sums up the purpose of *Postindustrial Possibilities*: "This book was written in the hope that a critique of . . . obsolete ideas may help expand the possibilities of change" (p. 218).

*In Other Words: Essays towards a Reflexive Sociology*. By Pierre Bourdieu. Translated by Matthew Adamson. Stanford, Calif.: Stanford University Press, 1990. Pp. ix + 223. \$32.50 (cloth); \$10.95 (paper).

Charles Lemert  
Wesleyan University

Not long ago my department proposed a job description containing the phrase "reflexive sociology." Our dean, being both a good man and a political scientist, asked what this meant. He meant, we suppose, what sort of social scientists talk like this? We tried to explain this unique feature of sociological work with learned references to Mills, Gouldner, critical theory, Giddens, and the ethnomethodologists, among others. He was, we believe, dazzled but unconvinced. We should have had him read Pierre Bourdieu.

Bourdieu is not the inventor of reflexive sociology, but he may be its most artful performer. Since, in recent times, Gouldner formulated the idea in the closing pages of *The Coming Crisis in Western Sociology*, reflexivity has been a more or less prominent feature of the most important developments in the discipline. One of the more succinct definitions of it in sociology is James Coleman's: "Sociology is a reflexive discipline, whose subject matter encompasses itself" (*Foundations of Social Theory*, p. 610). Whatever it means, Bourdieu does the thing and does it damn well.

To read Bourdieu's *In Other Words*, a collection of interviews and essays, is to enjoy a mind that works on many levels at once (a necessary skill for a reflexivist). Bourdieu seems perfectly able to reason coherently about any number of subjects (here he takes up sport, art, fieldwork, literature, philosophy, and opinion polls, among others), while at the same time keeping himself focused on the special conditions entailed in a sociology of such things no less than on his own attitude toward those

sociologies. In the first interview, "Fieldwork in Philosophy," Bourdieu recalls his discovery in the late 1950s that a statistical analysis of Arabo-Berber societies revealed that the presumed "normal" marriage with parallel girl cousins actually occurred in very small numbers. This, he recounts, led him to rethink basic sociological concepts of kinship rules and, in turn, the concepts of rule, practice, and time. This part is fascinating but not remarkable save for the evidence of his theoretical ambition.

A more reflexive nerve vibrates in the reader's gradual awareness of what is being claimed. Bourdieu, in discussing the mundane calculations of a young researcher, is actually situating himself in the intellectual field in which he is a player. He is declaring, retrospectively, the theoretical position he took in the 1960s against the structuralist fad—a stance from which, in the early 1970s, he derived his first full formulation of his now famous concepts, *field* and *habitus*. With these concepts, he intended to transcend the traditional sociological practice of thinking through what he now calls "absurd oppositions" such as that between subject and object. In other words, Bourdieu, speaking in the late 1980s, claims to have understood in the 1950s just what sociology needed in order to fulfill its unique responsibility among the social sciences. There are several unvoiced messages in this one reflex: "I was like but unlike others in the 1960s. . . . I believed in theory but I insisted, and still do, on empirical work. . . . I saw the postmodernism thing coming but didn't get caught up. . . . I hate much of sociology but I love sociology." (A reflexive sociology demands that one speak "in other words.")

Some will find this self-advertising; others will judge it good, if risky, sociology. The final judgment must rest on Bourdieu's many empirical works from the Algerian studies and *The Inheritors* in the early 1960s to *Homo academicus* and the torrent of studies appearing in his journal *Actes* through the 1980s. Bourdieu is a creative theorist who does original empirical research. *In Other Words* is an excellent informal guide to Bourdieu's sociological self-understanding. "Sociology," Bourdieu writes (p. 27), "confers on you an extraordinary autonomy, especially when you don't use it as a weapon against others, or as an instrument of defence, but rather as a weapon against yourself, an instrument of vigilance."

Those already well schooled in Bourdieu's thinking will probably have encountered the various parts of this collection elsewhere and thus be disappointed by its repetitions. But for their friends, and for students, this book may be just the right introduction to an elegant and important thinker—possibly the most inventive thinker in sociology today. Several pieces gathered here are quite special. "Landmarks" and "Fieldwork in Philosophy," which make up part 1, are splendid, readable introductions to Bourdieu's background and thinking—not deep, but clear and tasty. "A Lecture on the Lecture," Bourdieu's inaugural address at the Collège de France (and the concluding entry in this book), is a wonderful presentation and defense of sociology to nonsociologists. In between are pieces

of varying interest and quality, but most filled with something delicious —“Opinion Polls: A ‘Science’ without a Scientist” and “Programme for a Sociology of Sport,” in particular.

It is said that sociology in the United States is in trouble today. French sociology’s troubles began long before ours. But Bourdieu survived these disasters and is proof positive, not just that sociology can still be done well, but that without it, intellectual life and the university would be impoverished. Even if you already know the Bourdieu line, you can give this book to your deans. They might enjoy it. They will learn surely what reflexive sociology can be. If they are good readers, as well as good people, they will probably gain a new respect for sociology.

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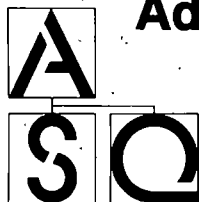
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## IN THIS ISSUE

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BARRY SCHWARTZ is professor of sociology at the University of Georgia. His recent work on collective memory includes the post-Civil War "democratization" of George Washington and the changing iconography of Abraham Lincoln. His current research focuses on Abraham Lincoln and the representation of the American past.

DAVID GARTMAN teaches and studies sociology at the University of South Alabama. He is the author of *Auto Slavery: The Labor Process in the American Automobile Industry, 1897-1950* and is currently completing a book on the social history of American automobile design entitled *Auto Opium*. His current interests include the cultural legitimation of late capitalism, the aesthetics of Fordism, and the culture of mass consumption.

DOUGLAS W. MAYNARD is working on an analysis of "bad news" informings in various settings—clinical and otherwise. This project includes a collaborative effort to describe the interaction order of the clinic. Theoretical interests in ethnomethodology and conversation analysis are also being applied to jury deliberations and survey research.

MATTHIJS KALMIJN is assistant professor of sociology at Princeton University. His general areas of interest are social stratification and social demography. His dissertation, recently completed at the University of

California, Los Angeles, examines shifts in the multidimensional structure of intermarriage in the United States.

ALAN SICA is professor of sociology at Pennsylvania State University and editor of *Sociological Theory*. His current writing concerns the role of rhetoric in the success or failure of social theory, neo-Weberian social thought, the art of writing book reviews, and special problems associated with child rearing in an age of video-cretinization.

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# Role as Resource in the Hollywood Film Industry<sup>1</sup>

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The theoretical concept of *role as resource* is introduced and illustrated. The concept combines critical elements of the structural, interactionist, and network approaches to role. A role is a resource in two senses: it is a means to claim, bargain for, and gain membership and acceptance in a social community, and it grants access to social, cultural, and material capital that incumbents and claimants exploit in order to pursue their interests. This article examines the impact of a major transformation—the rise of the blockbuster—on roles and positions in Hollywood filmmaking and discerns two processes underlying the growth and decline of roles in culture production. Through *adaptation*, filmmakers adopt role combinations with intrinsic capabilities of solving technical and organizational problems. Through *imitation*, filmmakers copy the role combinations associated with early blockbusters and gain legitimacy in Hollywood's institutional environment. These responses resulted in two fundamental trends: the increasing specialization of the producer and separation of the business and artistic domains, and the increasing fusion of artistic roles.

Role and position are fundamental concepts in sociology. They suffer, however, from fundamental divisions in definition, use, and meaning. Historically, sociological perspectives on roles have split into two broad

<sup>1</sup> We gratefully acknowledge William Bielby, Jon Cruz, Tom Durkin, Sam Gilmore, John Padgett, Gerald Platt, Woody Powell, Mark Shanley, and the anonymous *AJS* reviewers for advice, suggestions, and criticisms; Steve Hoch and Zvi Gilula for technical advice; and Chu Zhang for research assistance. We especially thank John P. Hewitt for his insightful comments on roles and resources. An earlier version of this paper was presented at the annual meeting of the American Sociological Association, Washington, D.C. (August 1990). Earlier versions were also presented at John Padgett's Workshop on Organizations, where we received many helpful comments. We also acknowledge the assistance of the staff at the Academy of Motion Picture Arts and Sciences and of our informants, respondents, and friends within the Hollywood film community.

streams, the interactionist and the structural (Turner 1985). A third perspective, the social network approach, has been used to attempt greater conceptual and methodological rigor (see, e.g., White, Boorman, and Brieger 1976; Boorman and White 1976). Each perspective makes valid and important contributions, but a more complete and realistic theory of roles should integrate all three. We propose one such synthesis by introducing a new theoretical concept—*role as resource*—and analyzing the processes by which roles as resources are used to create new positions and social structures in the elite setting of Hollywood filmmaking.

By examining roles and positions over two distinct eras of filmmaking, the preblockbuster and blockbuster periods, we discern two processes underlying the growth and decline of roles in culture production. Through *adaptation*, filmmakers adopt role combinations with intrinsic capabilities of solving technical and organizational problems. Through *imitation*, filmmakers copy the role combinations associated with box-office success to gain legitimacy (and thus influence) in the investment and creative communities of Hollywood. Both processes are revealed in the responses of filmmakers to the rise of the blockbuster. The blockbuster altered the importance of technical and organizational problems, which changed the relative efficacy of various role combinations. In addition, particular combinations were associated with the first blockbusters, adding credibility to such forms. In response, filmmakers adapted to the exigencies of the new environment by shifting to certain role combinations and imitating forms that were associated with the early blockbusters. In the aggregate, their responses resulted in two fundamental trends: the increasing specialization of the producer, coupled with the separation of the business and artistic domains, and the increasing fusion of artistic roles.

In Section I we present our theoretical framework for the analysis of role dynamics. We point out connections between our framework and the structural, interactionist, and network perspectives on roles. The concept of role as resource is introduced, defined, and illustrated. Section II describes the processes of adaptation and imitation as responses to the rise of the blockbuster. Hypotheses about role change in Hollywood are presented. Section III presents data and methods. Main findings are presented and discussed in Section IV. Our conclusion is Section V.

## I. THEORETICAL FRAMEWORK

### Roles, Positions, and the Combinatorial Problem

Our theoretical approach combines key features of the three perspectives on roles. As in structural role theory, we define role as a bundle of norms and expectations—the behaviors expected from and anticipated by one

who occupies a position (or status) in a social structure (e.g., Linton 1936; Gross, Mason, and McEachern 1958; Kahn et al. 1964; Banton 1965; Biddle and Thomas 1966). But we avoid the common confusion of role with position by adopting Winship and Mandel's (1983) clarification: role is a classification across social structures and position is a location in a particular social structure. Roles are "mechanisms by which people identify similar positions across different situations" (p. 316); they are social abstractions or generalizations that transcend specific social structures. Consistent with this distinction between role and position, we adopt the network definition of social structure as a pattern of positions and their relationships (e.g., Laumann 1966; Laumann and Pappi 1976), instead of the more abstract definition of social structure as a normative system.

Roles and positions are connected by enactment. In conventional treatments of role enactment, a role is thought to be enacted *from* a position: a person first assumes a preestablished position and then behaves (or learns to behave) in a role-appropriate manner. Whether a role is considered to be static and stable, like a script, or something that is made and remade (Turner 1985), a role is usually thought to be enacted from a fixed, preexisting position (e.g., Linton 1936, pp. 113–14). We reverse this process, arguing that roles are first claimed and then enacted *into* positions. Roles are used to *create* positions and their relationships (i.e., social structures). Social structures are created by concretizing (abstract) roles into real positions. Thus, like interactionist role theory, our view of enactment emphasizes that role behavior involves the purposive construction of relationships (and positions) and creativity in role playing rather than mere conformity to expectations (Turner 1985; Hewitt 1988).

To illustrate, consider the three key roles in Hollywood filmmaking—producer, director, and screenwriter. Conventional role theory, which presumes a preexisting "division of labor . . . [that] prescribes certain combinatorial patterns" (McCall and Simmons 1982, p. 119), implies that the configuration of positions would be invariant: three positions would be given in a film organization and a different person would assume each position and play its associated role. In Hollywood, however, combinatorial patterns are not fixed. Five distinct combinatorial patterns can be observed (fig. 1). In *role separation*, each role is enacted into a distinct position (P/D/S).<sup>2</sup> Business and artistic domains are separated, and artistic roles are split into separate positions (see fig. 2). The role composition of *Superman* (1978) is a prime example (Salkind as pro-

<sup>2</sup> We abbreviate the three roles as P (producer), D (director), and S (screenwriter). Enactments are indicated by the use of the slash (/) to represent the enactment of roles into separate positions. For example, P/DS means that the producer is one person and a second person combined the director and screenwriter roles.

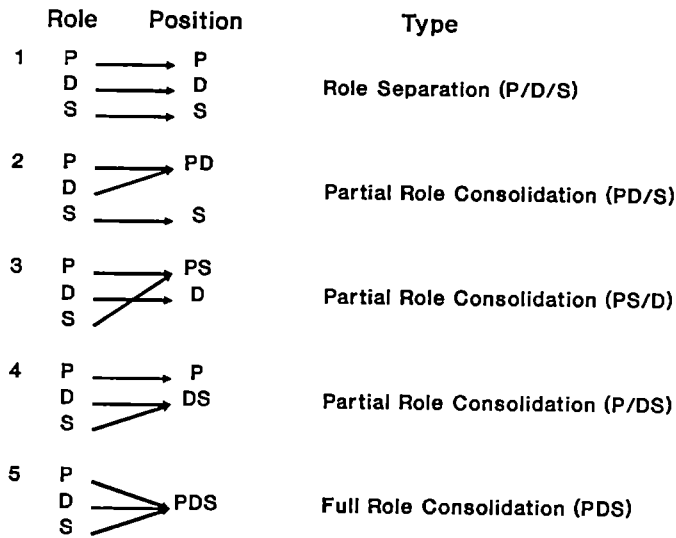


FIG. 1.—Five role enactments

ducer, Donner as director, Puzo as screenwriter). The opposite of role separation is *full role consolidation*: one position contains all three roles (PDS). All business and artistic role resources are claimed by one person and used to create a single, unified position. This pattern is exemplified by films made by Stanley Kubrick, Blake Edwards, and others. Between the poles of separation and full consolidation, there are three forms of *partial role consolidation*. Two bridge business and artistic domains, while the third keeps them separate (fig. 2). In one, the producer and

| Business and Artistic Domains |              |          |
|-------------------------------|--------------|----------|
| Artistic Roles                | Combined     | Separate |
|                               |              |          |
| Combined                      | PDS          | P/DS     |
| Separate                      | PD/S<br>PS/D | P/D/S    |

FIG. 2.—A typology of roles and positions



director roles are enacted into one position, and the screenwriter role is enacted into a second (PD/S). *West Side Story* (1962), *The Sound of Music* (1965), and *The Sand Pebbles* (1966) are films for which Robert Wise jointly enacted the producer-director roles (PD/S). The second occurs when the producer and screenwriter roles are combined into one position, but the director role is another (PS/D). In the third form, the producer role is enacted into a separate position, and the two artistic roles are enacted into a second (P/DS). This form was used in the first blockbuster film, *The Godfather* (1972).

The “combinatorial problem” must be solved each time a film is organized. It is particularly severe due to the nature and dynamic context of Hollywood filmmaking. Unlike large hierarchies, composed of (relatively) stable combinatorial patterns, a film is made by a temporary organization deliberately created for a limited purpose and disbanded upon its completion.<sup>3</sup> These “single-project organizations,” or SPOs (Faulkner and Anderson 1987), form in the volatile context of market-based free-lance contracting (Faulkner 1983; Christopherson and Storper 1989), not the stability of hierarchical staff arrangements, as in television writing (Bielby and Bielby 1986). Elements are combined, taken apart, and recombined in a continuous process of organizational formation and dissolution. In this tumultuous context, positions and relationships are never given, but must be actively constructed as participants struggle to enact roles and pursue careers.

The combinatorial problem exists by degrees in settings far beyond Hollywood that include informal social groups, organizations with flexible structures, like professional service firms (e.g., Baker 1990; Eccles and Crane 1988), and organizations undergoing rapid or fundamental change. But even at the top of large hierarchies, like *Fortune* 500 corporations, combinatorial problems must be solved: the separation-consolidation of the chief executive officer (CEO) and board-chair roles is a perennial problem of corporate governance (Harrison, Torres, and Kukalis 1988). Thus, while we focus on culture production, our concepts and framework are applicable elsewhere.

### Role as Resource

A role is a resource used to pursue interests and enact positions. It is a resource in two senses. First, as a social classification (Winship and Man-

<sup>3</sup> Unlike the studio form of organization, the demise of which took place in the 1950s, “motion pictures are now only rarely made by a single major studio (such as Paramount Pictures, Twentieth-Century/Fox, or Universal Studios). Instead, the major studio acts primarily as a financial investor, and an independent production company organizes the production” (Christopherson and Storper 1989, p. 334).

del 1983), role defines and signals a person's social identity; it enables others to classify, understand, and anticipate a person; it is an answer to the question, "Who are you?" A role is a resource used to claim citizenship in a social community, with rights and obligations pertaining thereto; a person without a role is like a person without a country. Thus, in our view, a role is something that is *used* (similar to Swidler's [1986] notion of culture as a tool kit). The use of role as a resource to bargain for and gain membership, acceptance, citizenship, and access to resources (see below) is particularly important in a context characterized by flux and turmoil, like Hollywood.

Second, a role grants access to a variety of resources. it provides claimants and incumbents with the *means*—cultural, social, and material resources—to pursue their interests. A role is the *nexus* of these resources and the *key* necessary to access them; it is a means of achieving control over occurrences with high impact on events. This view is similar to some formulations of power as "control over valuable resources via possession" (Burt 1977) and, more broadly, as structural claims over resources that influence the directions organizing will take (Zald 1970; Perrow 1970; Pfeffer 1981; Fligstein 1985).

There are three general types of role resources: cultural capital (Bourdieu 1984; Collins 1988, pp. 360–64), social capital (Coleman 1988), and material capital. In Hollywood, cultural capital includes the use and manipulation of business and artistic symbols; claims on artistic properties, such as ideas, premises, and screenplays; and claims on the use of others' reputations. Social capital is a resource for action that inheres in the structures of relations between and among social actors (Coleman 1988); in Hollywood it includes the social networks associated with deal making, film production, and distribution. Finally, material capital consists of physical assets, facilities, equipment, and so on; in Hollywood, it includes financial capital and tools of production (e.g., sets, props, cameras, designs).

How are roles used? Like all culture productions, film projects are arenas in which people with various business and artistic interests compete and negotiate to shape the decisions and premises upon which culture production is collectively organized (Becker 1974, 1982). Roles provide the institutional and cultural means to compete and negotiate. Producers, directors, and screenwriters, like the professions (Abbott 1988), vie for legitimacy, scarce resources, and jurisdiction. Roles are a resource because they grant legitimacy, stake claims on various resources, and delimit jurisdictions.

Consider, for example, a common role claimant in Hollywood, the would-be producer. By claiming this role one gets "calling card" rights—access to significant others in the industry. The would-be pro-

ducer uses the claimed role to announce intentions to make a film; to solicit, purchase, and promote artistic ideas; and to seek out and compete for investors, directors, artists, and so on. Producer Marty Bregman summarized it well: "I either buy a book, or have an idea, or acquire a magazine piece which I believe will ultimately make a good film. After I acquire the rights, I 'cast' a writer who has the right sensibility for this specific material. . . . After I have a screenplay, I bring on a director" (quoted in Bales 1987, p. 50; see similar comments by Zanuck and Brown in *American Film* [1975, pp. 38–39]).

Some believe that claiming the screenwriter role is the best way to break into the business. For example, producer Don Simpson opined, "If someone asks me what is the easiest way to break into the movie business, there is only one answer. Write an original screenplay. There is no easier way. There is no quicker way, no cleaner way. There is no more certain way" (quoted in Litwak 1986, p. 125). Having a script (or premise or treatment) does not guarantee that one will become a screenwriter, but it helps in laying claim to the role. And after breaking in as a screenwriter, one might be able to claim the director role as well, as did writer Lawrence Kasdan (*The Empire Strikes Back*, *Raiders of the Lost Ark*) on *Body Heat*.

Of course, attempts to claim and exploit roles as resources may be disputed, contested, or simply ignored.<sup>4</sup> Recalling an unsuccessful attempt at role claiming, one of our informants said, "This little dickhead came to me and said 'I'm a screenwriter' but all the little shit had was a three-page treatment!" In Hollywood, innumerable role claims are made—small armies are always competing to break into the business as producers, directors, screenwriters, composers, musicians, cinematographers, actors, actresses, technicians, and so on (see, e.g., Faulkner 1983, 1976)—but few role claims are ever fully realized.<sup>5</sup> Only when roles are claimed and result in a film project, however, have they been fully enacted.

Roles are a particularly important resource in Hollywood. Unlike the professions, which experience periods of (relative) stability when jurisdictional conflicts are settled (Abbott 1988), Hollywood is always in flux. Part of this stems from Hollywood's free-lance market-based context, which induces movement and mobility; part comes from the short-term, project-based nature of filmmaking itself. In such a context of fluidity

<sup>4</sup> We interpret Leifer's (1988) concept of "interaction preludes" to role setting as one of many competitive processes used in the enactment of roles (though this is not his emphasis).

<sup>5</sup> Note that the concept of role as resource does not depend on the relative success with which resources are used. Roles are exploited as one attempts to move a film through its various stages, even if the film is never made and released.

and flux, roles provide stability and continuity.<sup>6</sup> Roles persist, even as SPOs start up and end, people come and go. Positions, in contrast, change quickly and often in the rapid process of organizational creation and destruction.

### Combinatorial Patterns as Solutions

Filmmaking is a tenuous enterprise. It occurs in a business and technical environment characterized by high stakes, risk, and uncertainty. It requires substantial investments of financial capital for properties, artists, and support personnel. And it entails high personal and career risks. As director Sydney Pollack said, "Anybody who tells you he isn't scared to death directing a ten-million dollar movie with major stars is a liar. . . . I don't care if you're a hundred years old, you're scared because you've got a reputation at stake" (quoted in Litwak 1986, p. 199).

As in any "art world" (Becker 1982), filmmaking is plagued by the intrinsic dilemma of commercial versus artistic interests (see, e.g., Faulkner 1976). This is represented by the classic struggles between the producer and the artists (or, to use Hirsch's [1972, pp. 641-43] distinction, between the entrepreneur-administrator, located in the managerial subsystem, and the professionals-artists, located in the technical subsystem). This dilemma results in classic principal-agent problems (e.g., Fama 1980). For example, the producer's interests (getting a film made on time and within budget) are in conflict with the director's (creating a work of art), and the director can misrepresent actual expenditures of time and money (see, e.g., the *Heaven's Gate* debacle in Bach [1985]).

Production and creative processes for producing a hit (the "right ingredients") are poorly understood. As one of our artistic informants said, "I don't know a more cutthroat business than this one. It's partly so because we're dealing with what are the instabilities inherent in a creative process. And it's also because we're playing in an enormously high-rolling crap game." The production of innovations (films) necessitates leeway and discretion among project controllers and artists. The forms of coordination found in complex hierarchies (formal rules, performance audits, day-to-day accounting, etc.) are relaxed or absent in the filmmaking organization. Because search procedures for artistic problems are complex and choices among actions involve a high degree of experimentation, there must be a great deal of mutual coordination between those

<sup>6</sup> Of course, roles change. The point is that roles typically change very slowly, relative to changes in the configurations of positions (which change from project to project). Indeed, foreshadowing one of our conclusions, we speculate that a new role may be emerging in Hollywood, the so-called writer-director hyphenate (see Sec. IV).

who supervise the transformation of "raw materials" and those who provide the expertise and talent for this process. Thus, coordination of role players is a pressing problem.

Finally, in addition to technical and organizational problems, the institutional environment (Meyer and Rowan 1977; DiMaggio and Powell 1983) of Hollywood must be managed. The SPOs require legitimacy and credibility to attract creative and financial resources, perhaps even more than other types of organizations, due to Hollywood's high stakes, uncertainty, ambiguity, and lack of consensus about professional competence (DiMaggio 1977). One of the filmmaker's critical problems, therefore, is to find ways to gain legitimacy.

Combinatorial patterns offer solutions, real and perceived, to the problems of filmmaking. Choice is not a neutral exercise because each pattern represents different jurisdictions, relationships, and distributions of power and rewards, making the combinatorial problem a prime focus of competition and negotiation among role claimants and incumbents. Each pattern (see fig. 1) has advantages and disadvantages (which vary with circumstance and condition). Combinations that bridge commercial and artistic domains (PDS, PD/S, PS/D) reduce agency problems, holding other factors constant, and enhance the power of business interests. But forms of dual occupancy, where boundary spanning by the producer results in combined commercial and artistic responsibilities, might cause patterned ambivalence. Filmmakers in a dual commercial-creative position are subject to the industry's famous contradiction: Is film business or art? Coordination is simplified by consolidating roles (PDS, P/DS, PD/S, PS/D), but pressures for specialization created by technological change, greater administrative load, and so on, encourage the separation of business and artistic domains (P/DS) or full role separation (P/D/S). To control artists, producers may use divide-and-conquer tactics (P/D/S, PD/S, PS/D), but successful directors or writers will attempt a consolidated artistic position (DS) to guard individual autonomy and artistic properties (Brady 1981; Chase 1975; Mamet 1987). Finally, combinatorial forms vary in legitimacy, making it more or less difficult to obtain resources. Those who use and champion the "right" forms will be better able to do so.

## II. ADAPTATION AND IMITATION IN RESPONSE TO THE BLOCKBUSTER

### The Rise of the Blockbuster

The years prior to blockbusters were relatively quiescent; in contrast to the blockbuster era, relatively little is written about this period. By the beginning of the preblockbuster period, the well-known studio system,

organized around mass-production principles (Christopherson and Storper 1989), had been defunct for more than a decade; Hollywood had already made the shift from the studio's long-term, hierarchical arrangements and had settled into a market-based system of free-lance contracting. Blockbusters had yet to disrupt the system.<sup>7</sup>

But fundamental changes were underway in America's culture-producing industries (Coser, Kadushin, and Powell 1982; Garvin 1981; Powell 1979; Whiteside 1980).<sup>8</sup> Markets grew dramatically due to an expanding population with more discretionary dollars (Garvin 1981). Multimedia mergers and conglomerate ownership fostered an environment in which books, films, and so on were conceptualized and promoted as an integrated package (Coser et al. 1982, pp. 29–35). The change included the active pursuit of expensive projects, with a sharp upswing in fixed and variable costs. And it involved ever-larger sums, running into millions of dollars, that paid for artistic properties and the services of persons with proven records of commercial accomplishment.<sup>9</sup> In particular, it produced the "blockbuster strategy" now prevalent in most culture-production industries—films, theater, television, and book publishing (e.g., Bach 1985; Coser et al. 1982, pp. 30–35, 214–22; Garvin 1980).

The first blockbuster film, *The Godfather* (1972), was the harbinger of the new era in Hollywood. The first blockbuster in Hollywood surprised and puzzled everyone when it appeared (as first blockbusters did in book publishing and elsewhere). When *The Godfather* eclipsed every box-office record, some industry observers saw a one-time occurrence. But the film business has never been the same after that weekend in June 1975 when *Jaws* opened around the country and demonstrated that a movie could gross \$8 million in just three days. Before *Jaws*, producers and directors saw indications of a growing audience for film entertainment, as *The Exorcist* and *The Sting* enjoyed enormous (and surprising) gross reve-

<sup>7</sup> *The Godfather* appeared in the middle of 1965–80, so we divide the span into two equal periods, the "preblockbuster period" (1965–72) and the "blockbuster period" (1973–80). (For convenience, we also call the periods time 1 and time 2, respectively.)

<sup>8</sup> Our purpose is to outline the essential features of and changes in the Hollywood filmmaking industry while avoiding excessive detail. Sources cited in the text provide further details.

<sup>9</sup> Consider the published budgets for these projects (M = million): *Godfather* (\$6M), *Star Wars* (\$9M), *Godfather II* (\$13M), *Towering Inferno* (\$14M), *Close Encounters of the Third Kind* (\$19M), *Jaws 2* (\$21M), *Meteor* (\$21M), *The Black Hole* (\$21M), *Popeye* (\$21M), *Sorcerer* (\$22M), *Hurricane* (\$22M), *The Empire Strikes Back* (\$22M), *King Kong* (\$23M), *A Bridge too Far* (\$24M), *The Blues Brothers* (\$27M), *Ragtime* (\$25M), *Apocalypse Now* (\$31M), *Moonraker* (\$30M), *For Your Eyes Only* (\$30M), *Heaven's Gate* (\$35M), and *Star Trek* (\$42M) (figures from Thompson 1981; Dempsey 1981; Michener 1974; Orth 1974).

nues. But when the Zanuck-Brown shark tale grossed \$200 million, it was clear that the "right ingredients" could capture huge audiences. The nine-figure grosses of such hits as *Godfather II*, *Jaws 2*, *Star Wars*, *Saturday Night Fever*, *Grease*, *Animal House*, *The Empire Strikes Back*, *Indiana Jones and the Temple of Doom*, and *Close Encounters of the Third Kind*, to mention only a few, clearly signaled that Hollywood had moved into a new era—the "New Hollywood" (Keyser 1981; Bates 1978; Madsen 1975; Bach 1985; Hoberman 1985).

In this new and intense commercial environment, entrepreneurs, artists, deal makers, and contractors were weaving and reweaving the social arrangements by which films were made. They were also working and reworking action frames or conventions and shared understandings for filmmaking. In the 1970s, new goals, practices, strategems, and claims emerged. For instance, some focused on the volatile subsidiary rights and subsidiary income area, where earnings are made from sources other than direct film sales. Others started to rely on properties already successful in other media, buying "ideas" and "material" with proven commercial values for conversion into films. Increasingly, sequels and orchestrated tie-ins of paperbacks-movies-television were used in attempts to "manage" blockbusters (see, e.g., Coser et al. 1982, pp. 218–19, 266–69; Mayer 1978; Dempsey 1981; Garvin 1980). In similar attempts to reduce risk, some bought "insurance" by using established stars or artists. Still other filmmakers moved toward costly development deals with major studios to act as distributor, product promoter, and champion for the independent filmmaker. Most became aware that they could more easily recoup their huge investment by squeezing advance guarantees from the many picture-hungry theater owners (*Newsweek* 1977).

The "blockbuster strategy" was a major response to the new environment. Blockbusters heralded the potential for extraordinary financial gain, though it was recognized that few properties are so dramatically successful. Most attempts to make blockbusters fall short; the odds against repeat success are staggering. Yet blockbusters were pursued like the grail. The pressures to produce them stemmed from multiple sources. Noted critic Pauline Kael (1980) argued, for example, that culture production had moved "into the control of conglomerates, financiers, and managers who treat them as ordinary commodities" with its cardinal focus on "the numbers." Bach (1985), who worked for United Artists when it was owned by Transamerica, reports that corporate boss Andy Albeck's chief objective was the "locomotive"—the big-budget, blockbuster-potential films that would drive profits.<sup>10</sup> Overall, Holly-

<sup>10</sup> Garvin (1980) offers a supporting economic argument, claiming that the blockbuster is a *conservative* economic goal because one huge success outweighs numerous losses.

wood was reorienting itself in pursuit of the blockbuster. As one of our informants said in 1975, "There is now an emphasis on the big film, quote-unquote. Many people in this town are now trying to go after the major, big-hit project. This influences how they go about their work, of course. It affects the ideas they get. It affects who is up for the project [who is considered]." And, as producer Harry Ufland observed, "I think it has become a home-run business. Everybody is looking for home runs [blockbusters]" (quoted in Litwak 1986, pp. 89–90).

The blockbuster offered a new rationale filmmakers could use to advance careers. It was a new cause to champion, a new banner to unfurl, a new way to promote projects, attract financiers, and persuade talent. The blockbuster changed the rules of the game, but it was also used to change the rules. The strategic actions of filmmakers who championed and fought for the blockbuster idea transformed it into reality. In the process, pursuit of the blockbuster influenced combinatorial solutions, shifted power among key roles, and reshaped Hollywood. Overall, the effect of the blockbuster strategy is seen in two fundamental trends in the combinatorial organization of roles: the rise of the specialized producer with the increasing separation of business and artistic domains, and the increasing consolidation of artistic roles.

### Increasing Specialization of Producer Role and Separation of Business and Artistic Domains

Several pressures contributed to the increasing specialization of producers. First, the blockbuster focus made "the deal" and deal makers rise in prominence and prestige, so much so that one observer said that "it appears deal-making has replaced film-making as the principal activity of Hollywood" (Litwak 1986, p. 155). Second, more than ever, filmmaking posed more complex business problems, more elements to coordinate, and higher risks: huge sums spent on production, promotion, and distribution; critical decisions about property acquisition, financing, and intermedia tie-ins; and investments in high-priced, well-known, sought-after talent. The specialized producer, who avoids writing and directing, can concentrate on the deal, putting it together and pulling it off. Third, specialization enables the producer to develop expertise and experience in entrepreneurial activity, making budgets, and administering projects. It increases the producer's credibility, acceptance—and bargaining power—in the creative and financial communities.

The rise of the specialized producer is a result of adaptation and imitation. It was an effective response to the organizational, administrative, and technical demands of blockbusters, but it also conformed to emerging ideas about the "blueprint" for making blockbusters. The combinatorial



pattern used in *The Godfather* (P/DS) included a specialized producer. The use of this pattern in the first blockbuster might have been accidental or the result of a deeper readjustment to changing fundamentals in culture production. But whatever the reason, success spurs imitation (DiMaggio and Powell 1983), and we believe that filmmakers discovered that duplicating the blueprint was a way to gain credibility and legitimacy in blockbuster Hollywood.

Specialization put the producer in the center of Hollywood, a growing influence in filmmaking.<sup>11</sup> Indeed, the specialized producer became the initiator of films in ways that seem to evince disdain for artistic contributions. As producer Bregman put it, "I'm the one who brings the writer in, brings the director in. I people my projects" (quoted in Litwak 1986, p. 224). The blockbuster strategy concentrated power and "imperative control" (Weber 1947, pp. 324–63; Simpson 1971) in the hands of producers in the New Hollywood. It increased the value of the resources associated with the producer role; it gave a competitive edge to the specialized producer, who was now in an advantageous position to solve—or advance a claim to solve—the complexities and risks of filmmaking. Conversely, producers who did not specialize were put in a worse competitive position—less able to advance their projects, attract investors, or convince anyone that they had "the solution" to the problem of blockbusters. Far from a bloodless transformation, the shift into the blockbuster era helped those who championed, fought for, or followed the blockbuster call, but it hurt those who were unwilling or unable to do so.

Given the advantages (actual and symbolic) of the specialized producer and the disadvantages of the nonspecialized producer, the hypothesis of producer specialization leads us to expect an increase in the frequency of combinatorial forms that separate business and artistic domains (P/D/S), P/DS) and a decrease in the frequency of the forms that bridge the two (PD/S, PS/D PDS), comparing time 1 to time 2. Further, if the combinatorial forms that separate business and artistic domains *did* help to solve the problems of making films in the blockbuster era, we should expect a corresponding shift in the distribution of outcomes. Outcomes, measured as dollar rentals to distributors (the social benchmark used in the industry), have two important characteristics: average rentals and the dispersion of rentals.<sup>12</sup> The best outcome set includes high average rentals

<sup>11</sup> Many observers have noted the growing influence of film producers in the New Hollywood (e.g., Bates 1978; Chase 1975; Keyser 1981; Madsen 1975; Monaco 1979; Pye and Myles 1979; Stanley 1978). Few, however, have moved beyond such observations to analyze the underlying dynamics and mechanisms of the change.

<sup>12</sup> Unfortunately, profit and budget data are not systematically available, which makes it impossible to analyze profitability or costs.

(many blockbusters) with low dispersion (few flops); the worst set includes low average rentals with high variability. Within the preblockbuster period, we hypothesize that the combinatorial forms with separate producers (P/D/S, P/DS) will *not* outperform those with bridged business-artistic domains (PDS, PS/D, PD/S). Within the blockbuster era, however, we hypothesize that the forms with separate producers will be the best performers. Similarly, we expect that combinatorial forms with separate producers will show improvement in performance across periods, while those that bridge business and artistic domains will show a decline in performance across periods.

### Increasing Consolidation of Artistic Roles

The blockbuster era is associated with the rise of the consolidated director-screenwriter role (DS). It has been variously noted by Hollywood commentators as the rise of the "writer's cinema," the "auteur film" (e.g., Corliss 1975; Brady 1981), and the so-called artistic hyphenate (e.g., Brady 1981, p. 22; Chase 1975, p. 66).<sup>13</sup> The blockbuster strategy encouraged the formation of consolidated artistic roles. As the rise of blockbusters shifted power in favor of the specialized producer, it concurrently increased the bargaining power of directors and screenwriters with successful track records. The use of proven properties (a blockbuster from other media) and proven talent (hence the term "bankable star") was a major tactic to reduce the high risk of blockbusters. The writer of a successful screenplay, for example, was believed to be more likely than a newcomer to produce a hit. Therefore, successful directors and writers were in strong positions to bargain for consolidated positions (DS), and producers who relied on proven talent were susceptible to such bargaining tactics.

In a happy coincidence, the consolidated artistic position (DS) helps a producer manage some of the organizational problems associated with separate artistic positions (e.g., coordination) and manage the institutional environment. The fused artistic position, like the specialized producer, was associated with early blockbusters and could be used as a rationale to persuade risk-averse bankers and investors. In other words, the DS role became a more valuable resource. As P/DS became a statistical norm (used frequently) and yielded spectacular economic results, its legitimacy increased even more. Filmmakers could better advance their

<sup>13</sup> The fused director-writer position is associated with some of the best-known names in Hollywood: Woody Allen, Mel Brooks, Brian DePalma, Terrence Malick, John Milius, Walter Hill, Lawrence Kasdan, George Lucas, Blake Edwards, Francis Coppola, Paul Schrader, Oliver Stone, Robert Towne, and others (Brady 1981, p. 22).

interests by using the P/DS blueprint in an appeal to prevailing norms. Similarly, Harrison et al. (1988) argue that the consolidation of the CEO and board-chair roles in *Fortune* 500 corporations has certain advantages, including legitimacy gained by conformity to prevailing norms and lower board-chair turnover.

By itself, our hypothesis of the increasing consolidation of artistic roles would lead us, in comparing time 1 and time 2, to expect an increase in the frequency of combinatorial forms with a fused director-writer position (P/DS, PDS) and a decrease in the forms that split the artistic roles (PD/S, PS/D, P/D/S). However, our earlier hypothesis (separation of the business and artistic domains) operates in the opposite direction for combinatorial forms that bridge business and artistic domains. The effects of both hypotheses are summarized in table 1.

Both hypotheses lead to the same expectations for all forms of partial role consolidation: an increase in P/DS and declines in PD/S and PS/D. They lead to contradictory expectations for the extreme forms, role separation (P/D/S) and full role consolidation (PDS). If the effects of the hypotheses are equal in strength, we would expect P/D/S and PDS to exhibit stability across time periods with no significant increase or decrease from time 1 to time 2. Differences in the strength of each effect, however, might be inferred if changes in the use of role separation and role consolidation move in opposite directions. An increase in P/D/S and a decrease in PDS would indicate, for example, that the effect of producer specialization was stronger than the effect of artistic role consolidation.

Within the preblockbuster period, we hypothesize that the combinatorial form representing both trends (P/DS) will not *outperform* any other form and that the forms violating both trends (PS/D, PD/S) will not *underperform* the others. The P/DS form should not do better because it did not confer special advantages, real or perceived, in the preblockbuster period. Even if full-time attention to business and administration was important in the preblockbuster period, it was not *as important* as it would be in the far riskier blockbuster years. Moreover, the presence

TABLE 1  
HYPOTHESIZED EFFECTS OF TWO TRENDS IN HOLLYWOOD

|                     | Producer Specialization | Consolidation of Artistic Roles |
|---------------------|-------------------------|---------------------------------|
| P/DS .....          | +                       | +                               |
| P/D/S .....         | +                       | -                               |
| PDS .....           | -                       | +                               |
| PD/S and PS/D ..... | -                       | -                               |

NOTE.— + indicates increase in labeled activity; - indicates decrease.

of a director-writer hyphenate (DS) did not mean that proven artistic talents were working on the film (as we hypothesize it did in the blockbuster period) and, therefore, was not a signal that conveyed important positive information to bankers and backers. By similar reasoning, PD/S and PS/D are not expected to be poor performers because nonspecialized producers did not incur special liabilities and divided artistic roles did not convey negative information.

Within the blockbuster era, however, we hypothesize that P/DS would be the best performer of all. Similarly, not only do we expect this combinatorial form to show improvement in performance across periods, but to exhibit the largest improvement of all. In contrast, we expect that forms that violate both trends (PD/S, PS/D) will exhibit sharp declines in performance across periods. We hypothesize that the performance of forms that violate only one trend (P/D/S, PDS) will not improve or decline (unless one effect is stronger than the other).

If track records became important in the blockbuster period, we would expect to observe that more director-writers (DS) in the blockbuster period would have track records as a writer or director than would director-writers in the preblockbuster period. If so, then the blockbuster-inspired trend toward consolidation of artistic roles created new winners and new losers. It favored those with established track records but decreased the already meager odds of a newcomer breaking into the business. In effect, it heightened barriers to entry for those without a history of accomplishments, and, as an essentially conservative strategy, it constrained innovations as it minimized risks (see also Faulkner 1983, pp. 89–100).

### III. DATA AND METHODS

Our strategy is to examine a small number of roles in a large population of organizations over two major periods. To develop theory and hypotheses, we use archival records (journalistic analyses, Hollywood commentary, secondary interviews, etc.) and ethnographic interviews that we conducted with 95 active participants in the motion picture and television film industry. These included major producers, directors, screenwriters, agents, and production personnel. To test our key hypotheses about patterns and trends, however, we must quantify our data. Information on the total population of SPOs, producers, directors, and screenwriters is needed to analyze and document role enactments, dynamics, and change. A substantial "running record" (Webb et al. 1981) is also required to properly examine short-lived organizations over a lengthy period, examining both successful and unsuccessful films and their makers. The film business fortunately records an abundant history of projects, partici-

pants, their joint involvements over time, as well as detailed information on projects with total domestic sales over \$4 million.

The pattern of role enactments is studied by using the focal point of the industry: the Hollywood produced and distributed film.<sup>14</sup> The units of observation are movies made, released, and then reviewed in the Hollywood trade publications such as *Variety*, *Daily Variety*, and the *Hollywood Reporter*. These sources are supplemented by collections assembled at the Academy of Motion Picture Arts and Sciences, documents and interviews collected by the American Film Institute, and our own interviews with industry informants and participants.

Our population of SPOs consists of 2,381 films released by the industry between the 1965 production period (October 1965–September 1966) and the 1980 period (October 1980–September 1981). There are 1,238 films in the preblockbuster period (1965–72) and 1,143 in the blockbuster period (1973–80). The number of filmmakers with producer credits on films during the two periods is 758 and 635, respectively; with director credits, 635 and 633; with screenwriting credits, 851 and 871.

Rentals are adjusted by a price deflator based on the average ticket price in America per year, with 1980 as our base year (Vogel 1986, p. 369). We also used the consumer price index (CPI) as an economywide measure of inflation. Results based on each price deflator are quite similar, so we only report figures based on the ticket-price adjustment (a more precise industry-specific measure). Note that rentals are left truncated. The archival sources do not report rentals less than \$4 million (including losses). Rentals for these films are coded as zero. Left truncation does not introduce a bias that favors our results. Consider, for example, the hypothesized improvement in results from time 1 to time 2 for the P/DS combination. Truncating rentals below \$4 million cuts off the poorly performing films, which would have the effect of increasing the average in time 1, moving it closer to the time 2 average. In addition, it would decrease the relative variability of rentals in time 1. Thus, left truncation introduces a bias that makes it more difficult to find differences; if we find them, we can be confident that they represent true population differences. Price deflation has the same effect. By deflating rentals, we in effect exacerbate the left-truncation bias, lowering the measured average of time 2 (which had higher inflation) toward the time

<sup>14</sup> Our interest is in *feature films made and distributed by Hollywood*. We do not include documentaries, films about rock concerts, foreign-made films, compilation screen classics, American Film Institute student films, or productions whose origins or makers are unknown (or uncredited in screen titles). Others include all or most of the above in their more expansive definitions of “a film” (see e.g., Vogel 1986). Our count of films for the 1980 season is 191 films; Vogel (1986, p. 45), for instance, reports a total of 235 films.

1 average. Deflation, like left truncation, works against finding differences. With such biases against our hypotheses, one can be more confident that differences found represent true differences.

#### IV. ROLE DYNAMICS: FINDINGS

##### Preblockbuster Period

The distributions of the combinatorial forms created by the enactment of roles into positions are presented in table 2 and displayed in figures 3 and 4. As shown in figure 3, full role separation (P/D/S) is the modal organization form in the preblockbuster period, used in half of all films made. The combinatorial form of partial role consolidation with fused producer-director roles (PD/S) was the second most popular form (20%), followed by PDS (13%), P/DS (11%), and PS/D (6%). In the period before blockbusters, two very different combinatorial solutions were favored: the specialized producer with separate artists (P/D/S) or the non-specialized producer who directed (PD/S). The form that would become best suited to the New Hollywood (P/DS) was quite unpopular in the preblockbuster years.

Arraying the five forms by the typology in figure 2 above permits role enactments to be analyzed as a contingency table. The two dimensions of the typology—business-artistic separation and fused artistic roles—are

TABLE 2  
NUMBER OF FILMS AND AVERAGE RENTALS BY ROLE COMBINATION

| Time Period and<br>Role Combination | Number<br>of Films | Average<br>Rentals* | Standard<br>Deviation | Relative<br>Variation† |
|-------------------------------------|--------------------|---------------------|-----------------------|------------------------|
| Time 1:                             |                    |                     |                       |                        |
| P/D/S .....                         | 622                | 4.20                | 12.52                 | .120                   |
| PD/S .....                          | 246                | 4.38                | 15.79                 | .230                   |
| P/DS .....                          | 131                | 2.96                | 14.42                 | .427                   |
| PS/D .....                          | 79                 | 5.47                | 16.16                 | .335                   |
| PDS .....                           | 160                | 1.84                | 11.54                 | .497                   |
| Time 2:                             |                    |                     |                       |                        |
| P/D/S .....                         | 602                | 7.57                | 15.38                 | .083                   |
| PD/S .....                          | 115                | 4.36                | 9.25                  | .199                   |
| P/DS .....                          | 250                | 9.06                | 21.44                 | .150                   |
| PS/D .....                          | 65                 | 3.62                | 7.21                  | .249                   |
| PDS .....                           | 111                | 6.89                | 23.66                 | .327                   |

\* Rentals (in millions) adjusted by deflator based on average ticket price per year, 1980 = base (Vogel 1986, p. 369).

† Relative variation is Martin and Gray's (1971) standardized coefficient of variation.

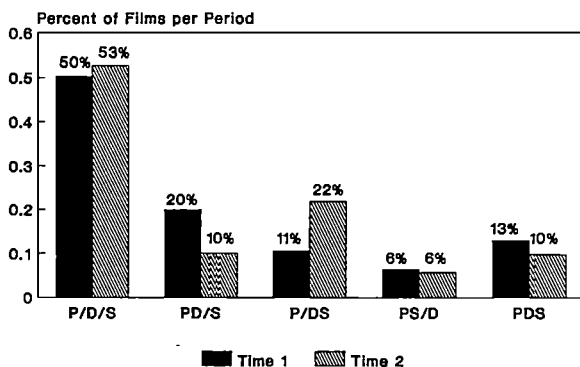
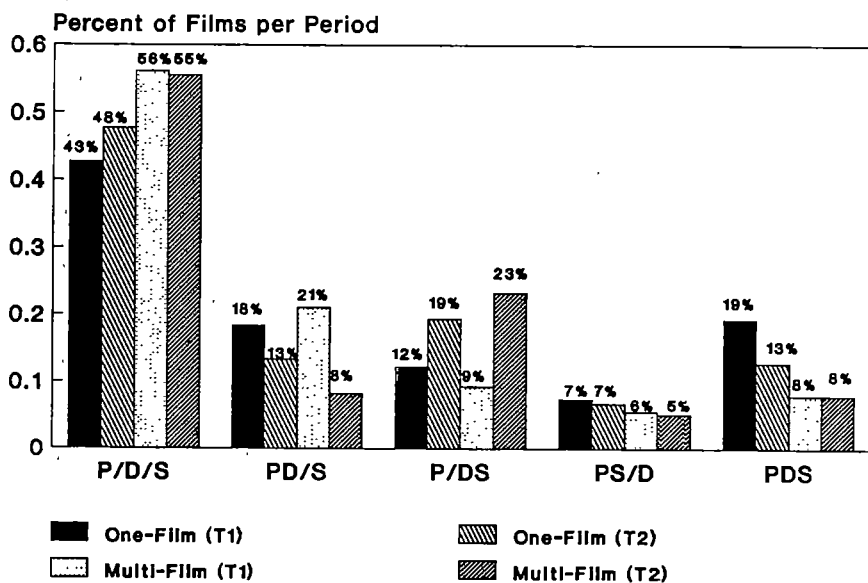


FIG. 3.—Total population of films



Note: Some percentages reflect rounding.

FIG. 4.—One-film versus multifilm producers

clearly related in the preblockbuster period ( $P < .001$ ;  $\chi^2 = 39.9$ ). There is a significant tendency for artistic roles to be fused when the business-artistic domains are bridged (PDS) and for artistic roles to be divided when the business-artistic domains are separated (P/D/S). Both role consolidation (PDS) and role separation (P/D/S) occur more frequently than expected, while the three forms of partial role consolidation (P/DS, PD/S + PS/D) occur less frequently than expected. Thus, the forms that violated only one of the two hypothesized trends (P/D/S, PSD) were relatively more popular in preblockbuster Hollywood than forms that represented or violated both trends (P/DS, PD/S + PS/D).

Hollywood is stratified by productivity (film credits) into tiers of players with different outcomes (Faulkner 1983). Exploring the possible differences between low- and high-productivity filmmakers helps to reveal successful and unsuccessful strategies (where success means getting to make more than one film). To analyze this, we divided the population of films into two subpopulations, those made by one-film producers (only a single film in a period) and those made by multifilm producers (two or more films in a period).

As shown in figure 4, films made by one-film and multifilm producers exhibit similar patterns overall, but there are some noteworthy differences. Both one-film and multifilm producers used role separation (P/D/S) more than any other form, but it was more popular among multifilm producers (56%) than among one-film producers (43%). Roughly 20% of all films made by both groups utilized consolidated producer-director roles (PD/S), but one-film producers used full role consolidation (PDS) much more often than did multifilm producers (19% vs. 8%).

Though getting a film made is one measure of success, the principal social gauge in Hollywood is gross film rentals (shown in tables 2 and 3 and figs. 5 and 6). As hypothesized, the combinatorial forms with separate producers (P/D/S, P/DS) did *not* outperform those with bridged business-artistic domains in the preblockbuster years, with the exception of full consolidation (PDS), the worst performer of all. Using one-way analysis of variance to test for differences in means, we find no significant difference ( $P > .05$ ) in average rentals for all pairs of role combinations except role consolidation (PDS), which has statistically lower ( $P < .05$ ) rentals than P/D/S and one combination with bridged business-artistic domains (PS/D).

There are substantial differences in the relative variability of rentals in time 1 (table 2). Though average rentals associated with role separation (P/D/S) are not statistically different than the other combinations (except PDS), this form yielded the lowest variability, only 12% of its maximum (Martin and Gray's [1971] standardized coefficient of variation varies from zero to one and may be interpreted as a percentage of its maximum).



TABLE 3

NUMBER OF FILMS AND AVERAGE RENTALS BY ROLE COMBINATION FOR ONE-FILM  
AND MULTIFILM PRODUCERS

| Type of Producer, Time Period,<br>and Role Combination | Number<br>of Films | Average<br>Rentals* | Standard<br>Deviation | Relative<br>Variation† |
|--|--------------------|---------------------|-----------------------|------------------------|
| One-film producers:                                    |                    |                     |                       |                        |
| Time 1:  |                    |                     |                       |                        |
| P/D/S .....  | 230                | 2.57                | 10.03                 | .258                   |
| PD/S .....   | 99                 | 3.74                | 21.35                 | .577                   |
| P/DS .....   | 66                 | .65                 | 2.61                  | .498                   |
| PS/D .....   | 40                 | 2.20                | 5.97                  | .507                   |
| PDS .....  | 104                | 1.82                | 13.90                 | .753                   |
| Time 2:  |                    |                     |                       |                        |
| P/D/S .....  | 197                | 4.28                | 11.59                 | .193                   |
| PD/S .....   | 55                 | 2.70                | 6.50                  | .328                   |
| P/DS .....   | 80                 | 4.69                | 9.30                  | .223                   |
| PS/D .....   | 28                 | 2.93                | 6.55                  | .430                   |
| PDS .....  | 53                 | .85                 | 3.09                  | .504                   |
| Multifilm producers:                                   |                    |                     |                       |                        |
| Time 1:  |                    |                     |                       |                        |
| P/D/S .....  | 392                | 5.16                | 13.70                 | .134                   |
| PD/S .....   | 147                | 4.81                | 10.57                 | .182                   |
| P/DS .....   | 65                 | 5.30                | 20.11                 | .474                   |
| PS/D .....   | 39                 | 8.82                | 21.52                 | .396                   |
| PDS .....  | 56                 | 1.87                | 4.83                  | .348                   |
| Time 2:  |                    |                     |                       |                        |
| P/D/S .....  | 405                | 9.17                | 16.70                 | .091                   |
| PD/S .....   | 60                 | 5.88                | 11.03                 | .244                   |
| P/DS .....   | 170                | 11.11               | 24.97                 | .173                   |
| PS/D .....   | 37                 | 4.14                | 7.72                  | .311                   |
| PDS .....  | 58                 | 12.52               | 31.73                 | .336                   |

\* Rentals (in millions) adjusted by deflator based on average ticket price per year, 1980 = base (Vogel 1986, p. 369).

† Relative variation is Martin and Gray's (1971) standardized coefficient of variation.

The other form with specialized producers (P/DS), however, is the second-most volatile, obtaining 43% of its maximum. The most volatile form is full role consolidation (PDS), which obtains 50% of its maximum. The enactment of the producer, director, and screenwriter roles into one position (PDS) is associated with the worst outcome set (lowest average and highest variability) in the preblockbuster era.

For films made by one-film producers, average rentals for the various role combinations are not statistically different ( $P > .05$ ), though P/DS, hypothesized to be the best performer in time 2, had the lowest preblockbuster average (see fig. 6). Similarly, for films made by multifilm producers, there are no significant differences ( $P > .05$ ) in average rentals

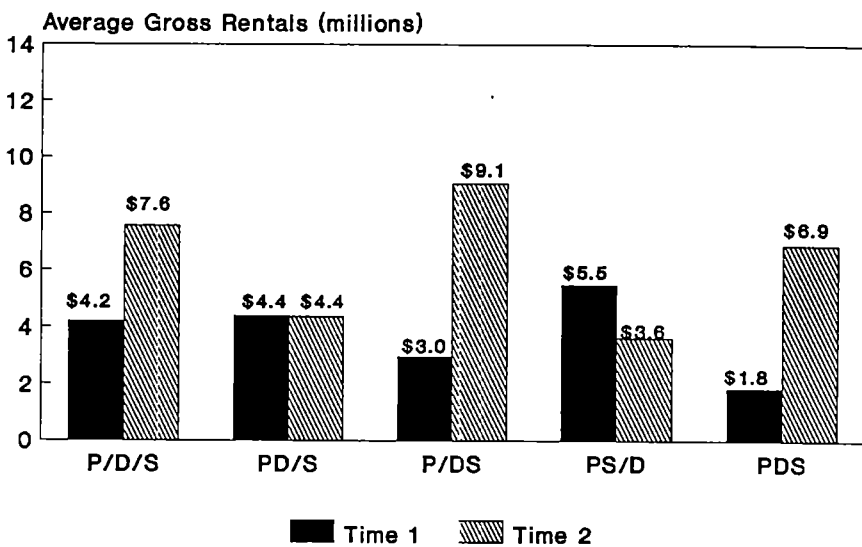
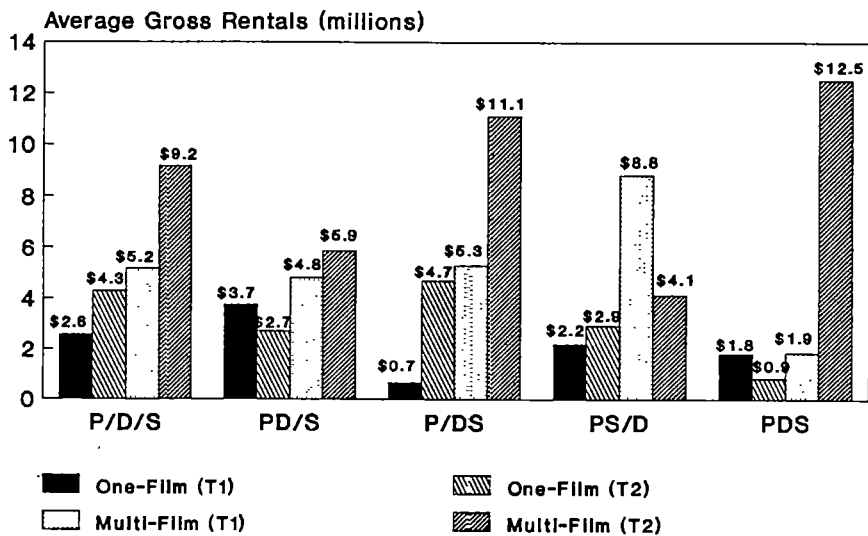


FIG. 5.—Average rentals by role combination



Note: Some amounts reflect rounding.

FIG. 6.—Rentals by role combination for one-film versus multifilm producers

among the various combinatorial patterns (except PDS rentals are significantly lower than PD/S and PS/D). Generally, the variability of rentals of films made by one-film producers is greater than the rentals of films made by multifilm producers (table 3). Forms with specialized producers (P/DS, P/D/S) yield the least-volatile rentals for one-film producers, while P/DS yields the highest and P/D/S the lowest for multifilm producers.

In general, the results support our hypothesis that combinatorial solutions with specialized producers (P/D/S, P/DS) would not outperform other combinatorial forms. (Role separation, however, is a good performer, judged by the criterion of low variability.) The form expected to be the best performer in the blockbuster era (P/DS) is a very poor performer in the preblockbuster era. These results are consistent with our argument that combinatorial solutions with specialized producers in general (P/D/S, P/DS), and the specialized producer with fused artistic roles in particular (P/DS), did not confer special advantages, real or symbolic, in the preblockbuster period. But things changed in blockbuster Hollywood.

### Blockbuster Period

The growth and decline of combinatorial patterns are consistent with predictions (see fig. 3). The hypothesized trends of producer specialization and artistic role consolidation both indicated that P/DS would grow dramatically in the blockbuster period. Indeed, its use doubled, growing from 11% to 22% of all films made, to become the second most popular form in time 2. Both trends indicated that PD/S and PS/D would decline. In fact, PD/S declined substantially, from 20% in time 1 to 10% in time 2. The other form with bridged business-artistic domains (PS/D) remained a stable and minor form.

The two hypothesized trends exert opposite pressures on role separation (P/D/S) and role consolidation (PDS). Therefore, each form was expected to be stable, unless the effect of one trend was stronger than the other. The use of P/D/S increased slightly (from 50% to 53%) and PDS decreased (from 13% to 10%), suggesting that the effect of producer specialization was stronger than the effect of artistic role consolidation.

The ascendancy of the P/DS pattern is more pronounced for films made by multifilm producers than by one-film producers (fig. 4). Only 9% of films made by multifilm producers used the P/DS combination in time 1, but fully 23% used it in time 2. One-film producers also increased use of this combinatorial pattern, but only by 7 percentage points (from 12% to 19%). The decline of the PD/S form is also sharper for films made by multifilm producers. Multifilm producers decreased use of this form by 13 percentage points (21% to 8%), while one-film producers

reduced use of this pattern by just 5 percentage points (from 18% to 13%). Overall, producers who followed (and reinforced) the two trends underlying the transformation of Hollywood were more successful (i.e., able to make more than one film).

We hypothesized a simultaneous decline in the use of combinatorial patterns that violated both trends (PD/S + PS/D) and an increase in the form that represented the trends (P/DS). In effect, we expected a decrease in the lower-left cell and an increase in the upper-right cell of the typology (fig. 2). It is possible to test these two hypotheses simultaneously and draw an integrated conclusion. Comparing each type over time as two independent binomial proportions, we find that, for the total population, there is a significant increase in the use of P/DS by time 2 ( $P < .025$ ), though not a significant simultaneous decline in the use of PD/S + PS/D by time 2 ( $P > .025$ ).<sup>15</sup> However, this varies considerably by subpopulation. For films made by one-film producers, neither change is statistically significant ( $P > .025$ ). For multifilm producers, however, *both* are statistically significant ( $P < .025$ ). Our hypothesis of a simultaneous increase in P/DS and decline in PD/S and PS/D is strongly supported for films made by high-productivity filmmakers. Successful strategies conformed with the underlying trend away from bridged business-artistic domains (especially PD/S) toward the specialized producer with fused artistic roles (P/DS).

These findings are given further support by the assessment of the independence of the two dimensions of the typology because they exhibit *weaker* departures from independence in time 2 compared with time 1. The dimensions are still statistically related for the entire population in time 2 ( $P < .01$ ;  $\chi^2 = 7.8$ ), but they are related for one-film producers only at the .05 level ( $\chi^2 = 4.3$ ) and are statistically independent for multifilm producers ( $P > .05$ ;  $\chi^2 = 3.5$ ).

There is some quantitative support for our hypothesis about the growing importance of artistic track records and the use of track records by directors and writers to bargain for a fused position (DS). Recall that the

<sup>15</sup> The null hypothesis is that the two proportions (for a given type) are the same in time 1 and time 2. The alternative hypothesis is that the proportion is larger in time 2 for P/DS and smaller in time 2 for PD/S + PS/D. The Z-scores are calculated as

$$Z = \frac{(P_1 - P_0)}{\sqrt{\frac{P(1-P)}{N}}},$$

where  $P_1$  = proportion in time 2,  $P_0$  = proportion in time 1, and  $P$  = overall proportion. The simultaneous test approach suggests that the critical value for significance tests should not be greater than .025.

use of integrated artistic roles doubled in blockbuster Hollywood (from 11% in time 1 to 22% in time 2). As expected, a higher percentage of director-writers worked on multiple films in time 2, compared with director-writers in time 1. Fifty-six percent of the 189 director-writers worked on more than one film, while 42% of the 113 director-writers in time 1 worked on multiple films. As expected, a higher percentage of director-writers in time 2 had worked previously as a screenwriter or director, compared with the proportion in time 1. Sixty-seven or 35% of the director-writers in time 2 had been writers or directors previously, while 29 or 26% of the director-writers in time 1 had been the screenwriter or director on his or her previous film.<sup>16</sup> These results are consistent with our hypothesis that proven talent was preferred in blockbuster Hollywood, compared with the preblockbuster years, and that artists with track records could bargain for consolidated positions (DS).

Surprisingly, a much larger percentage of director-writers in the blockbuster period worked in a consolidated artistic position on their *first* films (39% in time 2 and 17% in time 1). Even without an artistic track record, it appears that would-be directors and screenwriters were better able to claim and secure a consolidated position (DS) in the blockbuster period than in the prior years. The increase in the appearance of fused artistic positions on first films might indicate imitative behavior designed to appeal to the blockbuster blueprint (P/DS) for box office success.

The analysis of outcomes strongly supports our expectations that the combinatorial form with separate producers and fused artistic roles (P/DS) would be the best performer in time 2 (see tables 2 and 3 and figs. 5 and 6). In time 2, P/DS is associated with the highest average rentals, significantly greater ( $P < .05$ ) than either form that bridged artistic and business roles (PD/S or PS/D). Further, outcomes were much less variable for this form, dropping from second highest in time 1 to second lowest in time 2. Rentals for the two forms that violated both trends declined (PS/D) or remained the same (PD/S), yielding the two lowest averages in time 2.

Each of the combinatorial patterns that violated a single trend, role separation and role consolidation, yielded higher average rentals in time 2, compared to time 1. But only the average rentals of role separation (P/D/S) are significantly greater than PD/S and PS/D ( $P < .05$ ). Further,

<sup>16</sup> Our method was to locate each director-writer and array the person's films in historical sequence in a given period; then, we examined the person's position (D or S) on the film before the film with the consolidated position (DS). Our analysis is left truncated for each period. We could solve this problem for time 2 by dipping into time 1, but we did not do this because we were unable to do the same for time 1 due to lack of data prior to 1965. (Note that dipping into time 1 does produce even stronger patterns in favor of our hypothesis.)

P/D/S exhibited the least volatile rentals in time 2, while PDS exhibited the most volatile. Thus, usage patterns (P/D/S used more, PDS used less) and economic outcomes suggest that the effect of producer specialization is stronger than that of artistic role consolidation.

There are some similarities and differences in outcomes associated with films made by one-film and multifilm producers (table 3 and fig. 6). Each group experienced a dramatic improvement in performance over time for the P/DS form ( $P < .01$ ), but PD/S improved and PS/D declined for multifilm producers while PD/S declined and PS/D improved for one-film producers. Further, the average rentals for P/D/S increased for each group ( $P < .05$ , for multifilm producers only), while PDS rose dramatically for multifilm producers ( $P < .01$ ) and declined slightly for one-film producers. (The relative variability of rentals for one-film and multifilm producers are similar, as is evident in table 3.)

The quantitative results are consistent with our argument. The rise of the blockbuster disturbed the social organization of Hollywood in fundamental ways. It shifted power into the hands of the business interests and increased the value of the specialized producer; simultaneously, it increased the value of artistic track records, enhanced the bargaining power of accomplished directors and screenwriters, and resulted in the rise of the artistic hyphenate. These trends—the separation of business-artistic domains and consolidation of artistic roles—found expression in the P/DS combinatorial solution to the problem of filmmaking. The popularity of this combinatorial form doubled in the blockbuster period and became the best economic performer in blockbuster Hollywood—even though it was one of the worst in the preblockbuster years.

The blockbuster created a new opportunity structure for those who perceived it and were able and willing to take advantage of it. In the competitive struggle to claim and enact roles, the blockbuster strategy became a new way filmmakers could attempt to advance and realize their interests. By doing so, they helped to sustain and further the transformation of Hollywood filmmaking. Their strategic actions show that role enactment is not the result of slavish conformity to norms and expectations; roles are “played,” as Mead noted, the unexpected can happen, and creativity is used in establishing social relations (see also Turner 1985). In the blockbuster period, the “unexpected” was the increasing—and increasingly lucrative—enactment of roles into the P/DS combinatorial form.

The P/DS combinatorial form became the formula for success. Indeed, it proved to be an efficient and effective form of organization, yielding superior economic performances in the New Hollywood. It became a highly effective way to marshal and exploit cultural, social, and material

capital. The P/DS form also had greater credibility and legitimacy in blockbuster Hollywood. Filmmakers who used the P/DS blueprint in an appeal to prevailing norms enjoyed competitive advantages. Filmmakers who ignored or were unable to adjust to blockbuster Hollywood suffered. Combinatorial “solutions” that violated the underlying trends in Hollywood, and their advocates, lost legitimacy and experienced poor economic results.

Our last point is speculative. The rise of the director-writer hyphenate may signal the emergence, albeit incomplete, of a new role in Hollywood. During the blockbuster period, the artistic “hyphenate” became part of Hollywood parlance (Brady 1981; Chase 1975), a linguistic usage that could indicate the evolution of a new social classification—a new role. That is, it became a social abstraction or generalization that transcended particular positions (social structures). Part of this process was the repeated enactment of the director and screenwriter roles into the highly visible hyphenate position, coupled with superior economic results. These changes created a new and propitious opportunity, for those who perceived it, to claim and use the “role” of hyphenate to fight for and advance their interests. It became a *resource* in itself that artists could use to protect their properties and interests. As Chase (1975, p. 66) noted, for example, “In recent years, a broadly-based effort by writers to control, or at least be consulted about the translation of their material has resulted in a marked increase in so-called hyphenates.”

Other art worlds contain similar examples. Kealy (1979), for example, describes the emergence of a hybrid type of studio collaborator—the “artist-mixer” in the production and reproduction of rock music. Generally, when art and craft worlds overlap, we might expect new positions and roles to emerge (Becker 1978, p. 866). In book publishing, for example, the subsidiary rights from a popular book were claimed by various departments until a new role crystallized to handle these transactions (“subsidiary rights director”). This role, as opposed to other possible jurisdictions, signaled the triumph of business types (finance and marketing) over creative (editorial) types (see Powell 1979, pp. 10–12).

In stable environments, “traditional” positions are produced and reinforced (White 1981), resulting in the reproduction of old or conventional roles (even though role making is a continuous operation [Turner 1985]). But in environments undergoing deep transformations, such as culture production, the likelihood that *new* roles can be created is much greater. In changing contexts, new roles can help create and sustain the transformation as social actors claim and use them to fight for their interests (see also Fligstein 1987). Such a process may be taking place with the rise of the artistic hyphenate in the New Hollywood.

## V. CONCLUSION

This article provides a means to combine the structural, interactionist, and network approaches to role. To do so, we introduce the theoretical concept of *role as resource* and reverse the usual view of roles enacted from preexisting positions. As a resource, roles are used to pursue careers and advance interests in the struggle for power and influence. In particular, a role is used as a resource to create new positions and social structures.

We study the growth and decline of roles in culture production by examining the effect of a major transformation—the rise of the blockbuster in Hollywood—on the enactment of roles into positions. By doing so, we begin to redress Collins's (1988, p. 238) criticism that sociological theory has not progressed very far in the consideration of role change and the processes through which roles are transformed “either within a given situation or by a historical shift.” In Hollywood, filmmakers *adapted* to the rise of the blockbuster by shifting to combinatorial forms that were better able to solve organizational and technical problems. In addition, they *imitated* the combinatorial forms that were associated with blockbusters as part of an appeal to emerging norms about the “right ingredients” for making blockbusters. Together these responses resulted in two fundamental trends: the increasing specialization of the producer and separation of the business and artistic domains, and the increasing fusion of artistic roles. The combinatorial solution that represented both trends (P/DS) fared the best in blockbuster Hollywood.

The usefulness of our approach is shown by four theoretical contributions. First, a role can be conceptualized and analyzed as a social resource. Second, roles are claimed and enacted *into* new positions in unique combinatorial forms; roles, as social generalizations, are concretized as they are used to create new social structures. Third, role dynamics are shaped and influenced by transformations in environmental conditions. Fourth, role enactments are consequential: shifts in the use of combinatorial forms are associated with redistributions of economic outcomes.

There are several directions for future work. The utility of the concept of role as resource should be explored by focusing on the uses of roles in other settings. We examined simple organizational structures (single-project organizations). The use of roles as resources in more complex organizations should be considered. Such extensions would include analysis of the emergence of new roles, with specifications of the conditions and circumstances that foster or impede their emergence. Finally, role theory should consider more explicitly the economic consequences of role enactment.



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# Musical Patronage and Social Change in Beethoven's Vienna<sup>1</sup>

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This article attempts to account for the initial phase of the emergence of serious music ideology in late 18th- and early 19th-century Vienna by examining elite receptivity to the new ideology as it occurred against a backdrop of change in the organizational basis of music sponsorship. The decline of the private house ensembles (*Hauskapellen*) resulted in a social broadening of music patronage and thereby tended to erode the traditional institutional means for aristocratic authority in musical affairs. The exclusive function that the qualitatively different ideology of "serious" music could provide reaffirmed traditional cultural boundaries through ideological rather than institutional means and enabled Vienna's old aristocrats to emerge after 1800 as the city's "most brilliant" dilettantes.

One recent and important line of inquiry within the sociology of culture has emphasized the ways in which socially recognized hierarchies of cultural forms and their consumption act as mechanisms for the reproduction of status orders (e.g., Bourdieu and Passeron 1977, 1979; Bernstein 1977; Collins 1979; DiMaggio and Useem 1982; Apple 1982; Bourdieu 1984; DiMaggio and Mohr 1985; Lamont and Lareau 1988; Lareau 1989). Rather less attention, however, has been devoted to the conditions and processes according to which forms of capital are actually constituted and reconstituted over time and to how these forms emerge out of historically specific, micropolitical situations within which the "definition of cultural

<sup>1</sup> Portions of this article were presented at the annual meeting of the American Sociological Association, San Francisco, August 1989, and at the annual meeting of the American Musicological Society, Austin, Texas, October 1989. I would like to thank Hugh Mehan, Bennett Berger, Charles Nathanson, Jann Pasler, William Weber, Paul DiMaggio, Sara Delamont, Paul Atkinson, Pete Martin, John Wills, Doug Tudhope, and four anonymous referees for helpful comments on previous drafts. I would also like to thank Martin Read for help with data analysis, Mary Sue Morrow for answering specific questions on several occasions, and Julia Moore for very generously sharing her work on the decline of the *Hauskapellen* with me. Correspondence should be sent to Tia DeNora, School of Social and Administrative Studies, University of Wales, 62 Park Place, Cardiff CF1 3AS, Wales, United Kingdom.

nobility" (Bourdieu 1984, p. 2) is at stake.<sup>2</sup> Yet it is exactly this kind of attention that can provide one way of linking two often separate strands within the sociology of culture—on the one hand, concern with the social functions of taste and, on the other, the production of art (Becker 1982; Peterson 1976; Wolff 1984). Such a focus could, moreover, provide case-study examples of a culture-in-action (Latour 1987) perspective and therefore an entrée to the exploration of the fundamentally reflexive relationship between cultural and social forms.

It is to this end that the following case study is devoted. I focus on a period during which the meaning of a particular cultural competency—music sponsorship in late 18th-century Vienna—was altered, and I examine how these alterations permitted the social structure of music patronage to remain stable in the face of (and I argue, *in response to*) changes in the organizational basis of music production, distribution, and consumption. The broader sociological purpose of this examination is therefore twofold. I attempt, first, to highlight some of the ways in which the value of a particular form of cultural capital can be conserved or undercut through organizational arrangements,<sup>3</sup> and, second, I examine what elites can do when existing organizational means for the renewal of distinction through culture are no longer effective. I attempt to describe some of the ways in which the maintenance of distinction often requires creative and sometimes anticipatory strategies according to which the forms of what comes to count as capital are adapted in ways that keep them current. Through this discussion, I aim at an appreciation of the ways in which stability is as much of a "process" as is change—something that is often implicitly overlooked in contemporary studies of reproduction.

In brief, I argue that the emergence of a new form of patronage organization during the late 18th century posed a potential threat to the tradi-

<sup>2</sup> At least in part, this gap can be explained by the fact that the focus on capital has been generally linked to attempts to understand social reproduction in contemporary society, and the methods of these attempts (predominantly statistical, survey, and interview) have tended to reflect this concern. The historical perspective, conversely (as applied to the issue of cultural capital), has been largely ignored (for exceptions, see DiMaggio 1982; Zolberg 1981; Delamont 1989; see also Lamont and Lareau 1988, p. 157, n. 6). Yet in addition to describing the circumstances under which contemporary cultural classifications came to be institutionalized in the first place, historical studies can also tell us much about the ways in which cultural tools are employed, contended, undercut, maintained, or revised. They are, therefore, of interest in ways that extend beyond their substantive topics.

<sup>3</sup> By this I mean that these are procedures according to which consumption of or participation in cultural forms occurs and according to which access to such forms is limited, thereby insuring their distinctive value. Such procedures are effective in that they require resources—e.g., time, money, equipment—that are scarce.

tional basis of old aristocratic distinction through music consumption. In light of this threat, elite receptivity to what was (in late 18th-century Vienna) an alternative and, initially, minority ideology of musical seriousness can be conceived, at least in part, as a reaction to change. I attempt to outline the ways in which a shift within musical life away from an emphasis on the simple quantitative sponsorship of musical ensembles (and a concept of music's function as entertainment and celebration) and toward an emphasis on the qualitative sponsorship of a distinct musical ideology resulted in a more highly articulated scheme of patronage types (e.g., connoisseurs vs. less learned patrons) and thereby helped to preserve (at least for a time) the cultural boundaries between old aristocrats and others that music sponsorship had traditionally helped to constitute.<sup>4</sup>

The discussion that follows is arranged in four parts: (1) I briefly describe the nature and the social location of the change in music ideology and musical taste as these were indexed through public concert repertoires and other primary-source materials. I then outline some of the problems that result from the ways in which this change has previously been conceived. (2) I review the history of 18th-century Viennese high-culture music patronage up to the last quarter of the century, focusing in particular on the decline of the traditional institutional means of music sponsorship—the *Hauskapellen*—in order to assess previous and contending explanations for this decline. The point of this section is not simply to explore the topic of the decline of the *Hauskapellen* for its own sake but also to highlight the cultural and historical context of aristocratic music sponsorship—to discuss some of the conventional uses to which music was put prior to the late 18th century—and thereby to lay the groundwork for a subsequent consideration of how changes in late 18th-century Viennese musical life might, plausibly, have been viewed by music's traditional sponsors. (3) Next, I attempt to evaluate the extent to which the new organizational structure of music sponsorship facilitated a social broadening of musical life. (4) I then use this discussion to move into what is the central part of this article—an analysis of the ways in which organizational change was consequential for aristocratic patronage

<sup>4</sup> What follows is part of a larger study of the relation between the success of Beethoven's "difficult" style during his first decade in Vienna (and the practices his patrons engaged in to insure its—and his—success) and the transformation of high-cultural musical taste in early modern Europe. I am not attempting here to describe how the new ideology was developed but rather will try to discuss why such an ideology developed when and where it did. For a discussion of those practices, and of the circumstances through which Beethoven was initially poised for this type of success, see DeNora (1989).

projects, and I argue that the subsequent embrace by Vienna's aristocrats of the new model of musical life should be viewed against this change. Although I do not mean to suggest here that the degree of social broadening that the change in the organizational basis of musical life facilitated actually undermined aristocratic authority in the *short* term, I do wish to suggest that, had the practices that characterized aristocratic patronage remained unchanged (i.e., if Vienna's elites had not embraced a new musical ideology), aristocratic leadership in musical affairs would, over the *long* term, have been subject to erosion because, by the early 1800s, it was no longer fortified by an exclusionary organizational basis. I then conclude by proposing some of the more general sociological lessons that can be inferred from this rather specific historical case.

#### THE TRANSFORMATION OF HIGH CULTURE MUSICAL VALUES

In 1789 a writer in an early music periodical complained that, in comparison with the compositions of Leopold Kozeluch (1747–1818), which, he said, “maintain themselves and (in Vienna) find access everywhere,” Mozart's music did “not in general please quite so much,” and he attributed this state of affairs to Mozart's “decided leaning towards the difficult and the unusual” (quoted in Deutsch 1965, p. 349). Although he was willing to concede that Mozart had a “bold spirit” (a sort of backhanded compliment in the context), his opinions provided a fairly accurate reflection of Mozart's reception in Vienna during his later years. As another critic put it, in Cramer's *Magazin der Musik*, Mozart's *Haydn* quartets (K. 387, 421, 428, 458, 464, 465) were simply “too highly seasoned—and whose palate can endure this for long?” (as quoted in Deutsch 1965, p. 290). Thus Mozart, who only five years before (and at the height of his fame) had been praised for composing works that appealed to a general audience, was described in later life as too difficult for the average listener. Mozart had ventured too far into what the 18th-century music historian Charles Burney ([1789] 1957, 2:955) referred to as the “unmeaning art and contrivance” of J. S. Bach.<sup>5</sup>

Today, we are less aware of this lapse in Mozart's reputation than we might otherwise be because it was so quickly repaired. Less than a decade

<sup>5</sup> By the middle 1780s, Johann Sebastian Bach's music had gone out of fashion. The vicissitudes of Mozart's career have been discussed elsewhere (Jahn 1882; Schenk 1959; Sadie 1980; Olleson 1967; King 1955), though, with the exception of Olleson and King, little attention has been devoted to the ways in which Mozart's changing reputation was linked, during the 1780s, to the perception of his work as increasingly esoteric. Instead, Mozart's eventual unpopularity has been attributed to the Viennese penchant for variety, because of which Mozart simply went out of fashion.

later Mozart was hailed in the German language periodicals as “immortal Mozart” and was worshipped so generally that Constanze Mozart was able to advertise the program of an all-Mozart benefit concert by describing her husband’s death as having come, “too soon both for [his widow] and for Art” (as quoted in Deutsch 1965, p. 471). During the course of little more than a decade and a half, elite Viennese music ideology shifted rather dramatically, and with it, reputations of composers were realigned according to that aesthetic’s more explicitly hierarchical scheme of evaluative categories. In brief, this shift consisted of a move away from the fundamentally inclusive aesthetic (with its emphasis on composers of Italian opera and on relatively simple-textured, shorter, nonlearned works) that characterized elite musical life during the 1780s to—during the 1790s and early 1800s—an aesthetic built around the ideas of musical learning, symphonic and chamber genres (rather than virtuosic showpieces and opera highlights), complexity, seriousness, and “master” composers. Within this aesthetic, Mozart, Haydn, and especially Beethoven were highlighted as exemplars of all that was best in Viennese music while Kozeluch (and numerous other composers like him) were reclassified as “lesser contemporaries.”

#### The Early Emergence of the Serious-Music Ideology in Public Concert Repertories

Much of the groundwork for this shift occurred in the private world of aristocratic salons, especially as activity in these salons centered around the promotion of Beethoven, who was uniquely celebrated for the esoteric qualities of his compositions, as a “connoisseur’s” musician, increasingly known for what his contemporaries referred to as a “higher style of writing.” As an *Allgemeine Musikalische Zeitung* critic put it when discussing the piano sonatas opera 26 and 27 in 1804, “less educated musicians, and those who expect nothing more from music than a facile entertainment will take up these works in vain” (quoted in Wallace 1986, p. 10).

Reports, such as these, both of Beethoven’s piano prowess and compositional ability circulated widely during the 1790s and early 1800s, and they are useful for illustrating the emerging discourse of musical seriousness. They are, however, less helpful in clarifying the ways in which musical tastes were socially distributed during these years. For information on the social boundaries of the taste for Beethoven, and for serious music more generally, it is necessary to turn to repertory data and in particular to repertories of the public concert world. In comparison with the private world of salons (and with public music worlds elsewhere) this



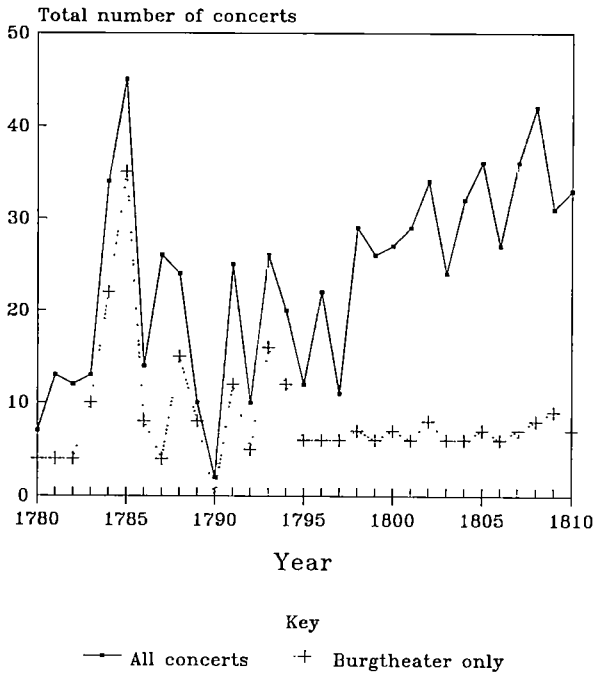


FIG. 1.—The rise in known public concerts and the decreasing proportion of known concerts at the most important of the court-controlled concert locations over time (Morrow 1989).

world was relatively small,<sup>6</sup> nonetheless, examination of it provides some of the clearest indications of how the serious-music ideology was associated primarily with Vienna's social elites.

There are at least three reasons for attempting to locate the new ideology via an examination of public concert repertoires. First, both the number of public concerts and the number of non-court-controlled concert locations rose steadily after around 1795 (see fig. 1), and, as public concerts were, on the whole, more accessible to nonaristocrats, they represent the musical activity of a broader sector of Vienna's population. Although the custom of hosting private concerts did (as I discuss below) begin to trickle down the social scale during the 1780s and 1790s, for

<sup>6</sup> In the conclusion of this essay, I consider the ways in which this relative insignificance of public concert life in Vienna helped to conserve aristocratic dominance in musical affairs.

most bourgeois in Vienna, the prospect of hosting private salons on a regular basis was (unless one was a musician or could count musicians as acquaintances) financially prohibitive. Indeed, even for someone like the civil servant Joseph Rosenbaum, who could count Haydn as a friend and whose wife was a professional singer, a salon was an occasion both costly and (because they had to do much of the preparation for it themselves) time consuming (see Radant 1968). A ticket or subscription to a concert or series, on the other hand, provided a more realistic alternative. Second, public concerts were often used by aristocrats as "showcases" for composers or performances that had already premiered privately, a practice to which the circumstances of many Haydn, Mozart, and Beethoven premiers attest. In this regard, aristocratically sponsored or organized public concerts can be understood as communicating to a wider audience what was already occurring in the world of the private aristocratic salons. Finally (and more practically) there is simply not enough specific information available on private concert programs: composers and works are often unidentifiable. Moreover, because record keeping of public concert programs was often systematic, a greater proportion of extant public concert programs have survived.

The most comprehensive collection of data on public concert repertoires is the one compiled by Morrow (1989), who has reconstructed a public concert calendar for the years 1763–1810 (as well as a less detailed private concert calendar for the years 1761–1810). These data are presented in raw form, by concert and in chronological order, so they provide a very rich source of information for scholars of Viennese musical life. When analyzed, they shed further light on two aspects of the changing ideology of late 18th-century musical life. First, they indicate that, with the decline of the *Hauskapellen*, attention within the repertory was concentrated on musical stars (Haydn, Mozart, and Beethoven) who were programmed at the expense of most other occupational musicians. Second, when the celebration of these composers is explored according to concert location, Morrow's data indicate that the emergence, during the 1800s, of the taste for explicitly serious music was almost exclusively located among Vienna's elite aristocratic patrons and was clearly not a major part of middle-class involvement in musical life. These two findings will now be discussed in brief.

When examined in context of the pool of public concerts presented in Vienna between 1791 and 1810, Mozart's, Haydn's, and Beethoven's compositions appear to have occupied a special place in Viennese concert life. Performances of compositions by Mozart, Haydn, and Beethoven were sustained over nearly the whole of this 20-year period, and they were sustained at a level of intensity higher than any of their contempo-

raries.<sup>7</sup> These composers can therefore be understood as musical “stars” in the sense that they occupied an exceptional amount of space within the Viennese public concert repertory as a whole; in this sense, their works occupied a *dominant* position in the Viennese concert world and signified a growing concentration of attention on musical celebrities (this confirms what Morrow [1989] and other scholars have already suggested; see also Moore 1987 and W. Weber 1977, 1978, 1984, 1986).

It would, of course, be wrong to suggest, on the basis of this finding, that the works of Haydn, Mozart, and Beethoven were programmed *universally* across concert locations or that they were all performed with any *regular* degree of intensity throughout this 20-year period. Indeed, on closer inspection, it becomes evident that performances of their works were not randomly distributed, either (in the case of Beethoven) over time or (in the case of all three) across concert locations, during these 20 years. Further qualifying the finding of Haydn, Mozart, and Beethoven as musical stars, therefore, helps to illuminate the ways in which there can be said to be a social distribution of musical taste in Vienna at this time—how explicitly “serious” music was associated primarily with Vienna’s old aristocrats and, conversely, was not associated with the middle class.

The total number of performances of Beethoven’s works, for instance, is somewhat misleading because the distribution of Beethoven performances was uneven. Thirty-two of the 80-odd performances of Beethoven’s music occurred in 1808 (see below).<sup>8</sup> Moreover, while performances

<sup>7</sup> Counting repeated concerts and also counting the number of times a composer is featured on a given concert program, over 100 performances of Haydn’s works are listed in Morrow’s (1989) concert calendar, over 80 each of works by Mozart and Beethoven. No other composer was performed with anywhere near this frequency. The fourth most frequently performed composer listed in Morrow’s calendar is Ferdinando Par, whose music was performed about half as frequently as these three. There is, of course, the issue of whether the number of Haydn, Mozart, and Beethoven performances is merely an artifact of record-keeping and data-preservation processes. This does not, however, appear to have been the case. First of all (and especially at court-controlled theaters) many of these concert program announcements were systematically preserved in theater archives at the time of issue by their contemporaries (though there are gaps for all sources). Second (and this is the case for the middle-class theater in Leopoldstadt as well as for the Theater an der Wien), theater record keeping is buttressed by diaries kept by theater kapellmeisters. Third, other contemporaries noted that Haydn, Mozart, and Beethoven had “star” status over and above their fellow musicians (see, e.g., Schonfeld [1976]—and, indeed, see simply the amount of space in that publication accorded to Haydn and Beethoven in 1796). Morrow herself suggests that “the preservation of source material seems to have been largely random, so that, except for a few cases that have been noted, the resulting data is not obviously weighted toward any one composer or genre” (1989, p. 148).

<sup>8</sup> It should be noted, however, that Beethoven ranks as the third most performed

of Haydn and Mozart appear to have been more evenly distributed across the 20-year period, public performances of Beethoven *rose* after 1800 and were boosted in 1808. It is, therefore, worth inquiring into the circumstances under which the increasing presence of Beethoven in the public concert repertory occurred, and for this it is necessary to examine these repertory statistics more closely and to look at the ways in which performances of composers' works were distributed according to concert location and, therefore, according to social group.

### Beethoven and His Public

The 1808 boost in Beethoven performances was due to five all-Beethoven concerts put on as part of the Liebhaber concert series (held at the Universitätssaal), the two all-Beethoven concerts that took place at the Theater an der Wien, an all-Beethoven concert held in the Kleine Redoutensaal, and through incidental performances of Beethoven at the Burgtheater (see Morrow [1989, pp. 347–52] for concert details for this year). Concerts at *all* these locations were organized at this time by Vienna's old aristocrats. At the Liebhaber concerts, for instance, tickets were distributed by the 70 members to "a carefully chosen audience of subscribers" (Morrow 1989, pp. 62–63)—none were sold to the public. The Theater an der Wien was taken over in 1806 by the Gesellschaft der Associierten Cavaliere (GAC), or the Society of Associated Noblemen, an association that was, throughout its off-and-on existence, 1786–1808, exclusively aristocratic. It is worth noting, incidentally, that George Frideric Handel (who, at this time was seen within the serious music ideology as the "Shakespeare" of music) began to appear on Theater an der Wien concert programs only after 1806. The Burgtheater and Redoutensaal were also taken over by the GAC in 1807. Thus, Beethoven was most intensively programmed at concerts organized by Vienna's old aristocrats.

How, meanwhile, did Beethoven fare with middle-class audiences? The most clearly middle class of Vienna's concert locations at this time was the Theater in der Leopoldstadt, a theater located in Vienna's suburbs. Its ticket prices were consistently lower than those for similar types of seats at the court-sponsored Burgtheater or at the Theater an der Wien (Morrow 1989, pp. 131–35)—there is no information on Universitätssaal concert ticket prices. Judging from the programs listed in Morrow's public concert calendar, Beethoven was never performed at this theater. Moreover, though the Leopoldstadt repertory did partially overlap with

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composer during this period even if the number of performances given during 1808 are discounted.

repertoires of other concert locations (see table 1), what was shared, apart from Haydn, Mozart, and Cherubini, was generally the older-style Italian composers (Domenico Cimarosa, Vincenzo Righini, Giovanni Paisiello), two of whom continued to be performed at the middle-class theater after they were dropped from the Theater an der Wien. Luigi Cherubini, meanwhile, who was hailed as a "new-style," serious composer, came onto Leopoldstadt programs later than at the Theater an der Wien. While the middle-class, suburban theater was more conservative with respect to the "aristocratic" composers featured there, it was, at the same time, known for presenting rather spectacular "programmatic" showpieces, such as the battle symphonies of Ferdinand Kauer and the occasionally bizarre antics of the Bohdanowicz family (see Morrow [1989] for details). Its kapellmeister was Wenzel Muller, a composer of 272 light operettas. The taste for these composer/performers is not indicated by the more aristocratic concert repertoires, but the Bohdanowicz family was featured at the other middle-class concert location, Jahn's restaurant. Although Beethoven was also programmed at Jahn's, his works appear on only three separate programs, in 1797, 1798, and 1806, and thus by no means constitute a staple of the repertory there, where the older, Italianate composers such as Cimarosa and also Eberl and Pleyel were highly featured. (The last recorded performance of music at Jahn's occurred in 1806 [see Morrow 1989].)

Haydn and Mozart were, of course, programmed at the two middle-class theaters; indeed, they appear on four of the five locations' lists of "most often programmed" composers (see table 2). It would, however, be wrong to conclude that, Beethoven aside, the taste for "serious" music was distributed evenly across social groups simply because compositions by Haydn and Mozart appeared at all concert locations. Indeed, when we examine more closely *which* works by Mozart and Haydn were performed at which location (see table 3), it becomes clear that the type of composition varied from place to place, and this is especially so with Mozart (who was perceived as the less accessible of the two). "Lighter" genres (i.e., shorter pieces, less complex textures, more virtuosic pieces, or pieces with simpler construction, such as songs, arias, overtures, piano ditties, and concerti) appeared primarily at the middle-class Leopoldstadt theater, while the Theater an der Wien and the Universitätssaal concerts featured symphonies, cantatas, concert versions of opera, and Mozart's Requiem instead of, or in addition to, the genres offered at Leopoldstadt (also see Morrow's [1989, pp. 84, 156–57, 215] discussion of the consensus, within the music press, that concerts at the Leopoldstadt were of generally "low" quality).

Thus, while music by the "star" composers Haydn and Mozart was indeed common to all of these concert locations, the ways in which Haydn

TABLE 1

COMPOSERS' FIRST AND LAST APPEARANCE IN MORROW'S PUBLIC CONCERT CALENDAR  
BY CONCERT LOCATION, LISTING ONLY THOSE COMPOSERS FEATURED AT TWO OR  
MORE LOCATIONS DURING THE YEARS 1791-1810\*

| COMPOSERS HELD<br>IN COMMON: | LOCATION  |              |            |                  |
|------------------------------|-----------|--------------|------------|------------------|
|                              | Jahn's    | Leopoldstadt | Wien       | Universitätssaal |
| All:                         |           |              |            |                  |
| Haydn .....                  | 1798-     | 1300-        | 1791-      | 1807-8           |
| Mozart .....                 | 1791-     | 1304-        | 1791-      | 1807-8           |
| Cherubini .....              | 1806-     | 1310         | 1804       | 1807             |
| JLW:                         |           |              |            |                  |
| Sarti .....                  | 1797      | 1795         | 1801       |                  |
| Cimarosa .....               | 1795-1802 | 1795-1804    | 1792       |                  |
| Paisiello .....              | 1795-1802 | 1308         | 1798       |                  |
| JWU:                         |           |              |            |                  |
| Beethoven .....              | 1797-     |              | 1798-      | 1807-8           |
| LWU:                         |           |              |            |                  |
| None                         |           |              |            |                  |
| JLU:                         |           |              |            |                  |
| None                         |           |              |            |                  |
| JW:                          |           |              |            |                  |
| Pleyel .....                 | 1804-5    |              | 1791, 1809 |                  |
| Hummel .....                 | 1805      |              | 1806       |                  |
| Kreutzer .....               | 1805      |              | 1806       |                  |
| LW:                          |           |              |            |                  |
| Anfossi .....                |           | 1795         | 1798       |                  |
| Righini .....                |           | 1301         | 1798       |                  |
| Sussmayr .....               |           | 1310         | 1805-9     |                  |
| Clement .....                |           | 1310         | 1805-9     |                  |
| JL:                          |           |              |            |                  |
| Martini .....                | 1802      | 1301         |            |                  |
| LU:                          |           |              |            |                  |
| None                         |           |              |            |                  |
| JU:                          |           |              |            |                  |
| None                         |           |              |            |                  |
| WU:                          |           |              |            |                  |
| None                         |           |              |            |                  |

NOTE.—J = Jahn's restaurant; L = Theater in der Leopoldstadt; W = Theater an der Wien; U = Universitätssaal.

\* Concerts at the Universitätssaal took place during the years 1807 and 1808 only. Dates followed by a dash indicate that the composer's last performance during this period occurred in 1810.

TABLE 2

COMPOSERS MOST OFTEN LISTED AT THE FOLLOWING LOCATIONS WITH NUMBER OF PERFORMANCES OF THEIR WORKS, AND THE YEARS DURING WHICH THEY ARE LISTED FOR THE PERIOD, 1791-1810

| Jahn's                                  | Leopoldstadt                                  | Wien  | Universitätssaal                           | Burgtheater  |
|---|---|---|--|--|
| Mozart (11), 1791-<br>Eberl (6), 1804-5 | Haydn (6), 1800-<br>Mozart (5), 1801-         | Beethoven (22), 1798-<br>Mozart (13), 1791- | Beethoven (9), 1807-8<br>Haydn (3), 1807-8 | Haydn (79), 1791-<br>Par (23), 1800-8  |
| Cimarosa (6), 1795-1802                 | Cimarosa (5), 1795-1804                       | Cherubini (12), 1804-                       |  | Mozart (22), 1791-   |
| Haydn (5), 1798-                        | Muller (5), 1796-1808<br>Kauer (5), 1798-1809 | Haydn (10), 1791-                           |  | Beethoven (20), 1795-<br>Weigl (13), 1791-1807<br>Mayer (12), 1802-8<br>Paisiello (11), 1791-1804<br>Eybler (11), 1794-1804<br>Cherubini (11), 1805-<br>Salieri (9), 1795-1809<br>Auernhammer (8), 1795-1806<br>Winter (8), 1796-1810<br>Sussmayr (8), 1797-1809<br>Handel (8), 1792-1807<br>Cimarosa (8), 1793-1810 |

SOURCE.—Morrow 1989.

NOTE.—In addition to Beethoven and Haydn, the Liebhaber concerts at the Universitätssaal featured performances of Mozart, Himmel, Cherubini, Rode, and Muller. These composers appeared on Liebhaber programs only once, at the first concert in the series. Subsequent concerts were devoted to music of Beethoven and Haydn.

TABLE 3

## MOZART AND HAYDN PERFORMANCES BY LOCATION AND GENRE

| Genre  | Wien (15) | Jahn's (10) | Leopoldstadt (6) | Universitätsaal (1) |
|--|-----------|-------------|------------------|---------------------|
| Location and number of concerts listed with Mozart on program: |           |             |                  |                     |
| Symphony .....   | 3         | 1           |                  | 1                   |
| Cantata .....  | 3         |             |                  |                     |
| Opera .....  | 3         |             |                  |                     |
| Aria .....   | 3         |             | 2                |                     |
| Concerto .....   | 1         | 4           | 1                |                     |
| Variations .....   | 1         |             |                  |                     |
| Requiem .....  | 1         | 1           |                  |                     |
| Vocal trio .....   | 2         |             |                  |                     |
| Vocal quartet .....  | 1         | 1           |                  |                     |
| Overture .....   |           | 1           | 1                |                     |
| Piano rondo .....  |           | 1           |                  |                     |
| Four-hand sonata .....   |           |             | 1                |                     |
| Location and number of concerts listed with Haydn on program:  |           |             |                  |                     |
| Symphony .....   | 6         | 4+          |                  | 2                   |
| Cantata .....  |           |             |                  |                     |
| Opera/oratorio .....   | 1         |             | 4                | 1                   |
| Aria .....   |           |             |                  |                     |
| Concerto .....   |           |             |                  |                     |
| Variations .....   |           |             |                  |                     |
| Requiem .....  |           |             |                  |                     |
| Vocal trio .....   |           |             | 3                |                     |
| Vocal quartet .....  |           |             | 4                |                     |
| Overture .....   |           |             | 1                |                     |
| Piano rondo .....  |           |             |                  |                     |
| Four-hand sonata .....   |           |             | 1                |                     |
| Movement from instrumental work .....                          |           |             | 1                |                     |
| Chorus .....   |           |             | 1                |                     |
| Vocal duet .....   |           |             | 1                |                     |

SOURCE.—Morrow 1989.



and Mozart were *featured* varied. The early 1800s version of Mozart, in which he is represented through his lighter works as programmed at the Leopoldstadt theater, more closely resembled a conception of the composer more in keeping with that programmed at the Theater an der Wien in the 1780s and early 1790s—the specific works selected reflected a “successful” and “popular” Mozart, as understood during his lifetime. It was also in keeping with the earlier and more universally shared taste for Italianate operatic music and the amateur-oriented aesthetic of “general taste” that aristocrats began to abandon during the 1790s. Examination of the public concert repertory, therefore, indicates that Vienna’s old aristocrats were closely linked to Vienna’s three dominant composers during these years, and, further, that they were linked to conceptualizations of these composers that emphasized their seriousness. In this respect, repertory data confirm the anecdotal evidence offered by late 18th-century observers (see also Wallace [1986] and DeNora [1989] for discussions and specific treatments of Beethoven in the music journals of his day). As the Viennese correspondent to the *Zeitung für die Elegante Welt* put it in 1805 when describing one aristocratic salon, “Sunday mornings, and perhaps also Fridays are usually devoted to *true music*, which one never loses sight of here. The string quartets of Haydn, Mozart, Beethoven or Romberg, occasionally of Wranitzsky, are usually played. The easier keyboard music of a Pleyel, Wanhall, Kozeluch is *entirely out of style*” (as quoted in Morrow 1989, p. 9 [emphasis added]).

Thus, it seems fair to say that a serious-music ideology, which took as its exemplars Beethoven and reconstituted, more explicitly “learned” and grandiose conceptions of Mozart and Haydn, emerged during the 1790s in Vienna, and that this ideology was primarily subscribed to by old aristocrats, not the middle class. This runs counter, of course, to what Hauser (1962), Raynor (1976), Adorno (1976), and a host of other scholars have had to say (often on the basis of scant evidence) about the origins of serious-music ideology and, as such, it challenges received sociological wisdom (and generally, the Beethoven myth) concerning the origin of the musical canon.

Over the course of the past decade, other scholars have outlined the contours of this trend toward musical “classics” (W. Weber 1977, 1984, 1986; DiMaggio 1982) and, more generally, the emergence of the category “high art” (Zolberg 1981; DiMaggio 1982; Levine 1988; Tuchman 1989; Abrams 1985) as it occurred both in Europe and in America. So far, however, most work on the topic has focused on the middle and late 19th century. Yet, as several music scholars have at different times remarked in passing (W. Weber 1986; Rosen 1972; Kerman 1983), developments in late 18th-century Viennese music ideology may be seen as prototypical of a subsequent (and, eventually, international) shift. In recent years,

moreover, some excellent social historical studies of Viennese musical life have appeared (Hanson 1985; Morrow 1989; Moore 1987; Freeman 1987) and the comparative picture that they now make possible suggests ever more strongly that, although musical life was certainly thriving elsewhere at this time (indeed, in terms of commercial organization and sheer numbers, London musical life was far more advanced), it was in Vienna that the new model of musical seriousness (and, in particular, an appreciation of musical complexity) was initially formulated. In the next section, I examine the organizational and cultural context in which this Viennese aristocratic activity occurred and against which it can be viewed as a status-conscious endeavor.

#### CHANGES IN THE INSTITUTIONAL STRUCTURE OF PATRONAGE

##### Competing Conceptions of Change in Viennese Music Patronage: Contextualizing the Meaning of Musical Practices

The court cultivates music passionately and the nobility have  
an inordinate love and knowledge of music.

[REICHARDT, *Vertraute Briefe*, 1783]

As will become evident below, the motivating force that Reichardt attributed to these Viennese music patrons (and which subsequently became part of the folklore of music history and a resource for explaining their enthusiastic support of the serious-music ideology) may have been more flattering than it was accurate. Music patronage in the 18th century was born out of observance of convention, duty, fashion and one-upmanship as often as it was out of "inordinate love and knowledge." Nevertheless, it was undoubtedly through the efforts of the imperial court and the Viennese aristocrats that Vienna, while by no means the largest European music capital, could claim to be the most prestigious, from around mid-century well into the 1820s. By 1792, the year of Beethoven's arrival in Vienna, the city was at the height of its musical powers, though the social and institutional basis of its music world was undergoing a profound change.

In brief, the history of high-culture music patronage in 18th-century Vienna comprises (1) the rise and fall of the imperial *Hofkapelle* under Karl VI and Maria Theresa, respectively, (2) the rise and fall of aristocratic *Hauskapellen*, (3) the emergence of dilettante forums during the final quarter of the century, and (4) the emergence of free-lance musicians and the earliest forms of the Viennese version of the public concert, all of which will be explored in more detail below. In his history of Viennese concert life, the 19th-century music critic Eduard Hanslick (1869) re-

ferred to the whole of this phase (1750–1800) as the “patriarchal era” and to the 30 years that followed as the period of dilettante associations. While Hanslick was attempting to call attention to the general decline of private forms of music sponsorship and the subsequent diffusion of patronage to which that decline gave rise, he by no means intended to imply that the end of the patriarchal period was characterized by a decline in aristocratic participation in musical affairs. Indeed, he was fully aware that the Viennese aristocrats remained active and, for the most part, dominant in musical affairs well into the 19th century (far later than their Parisian or London counterparts), and he described what he saw as the emergence of these aristocrats as Vienna’s “most brilliant” early 19th-century dilettantes. In this respect, Hanslick’s views tended to reflect the ways in which these aristocrats were perceived by their contemporary observers (e.g., as reported in music periodicals—see Wallace 1986).

Subsequent scholars, however, have tended to reject Hanslick’s account and to propose an alternate conception of the relationship between institutional change and aristocratic authority. As we shall see, however, their reassessments tend to overcompartmentalize “18th-century” versus “19th-century” forms of musical life insofar as they tend to exaggerate the participation and relative influence of the middle classes and to underplay the continued importance of aristocratic authority. Nevertheless, these accounts have attained mythic status among 19th-century music scholars, for whom, as the historian William Weber (1978, p. 176 ff.) has put it, the “jack-in-the-box” concept of the middle class has functioned as a “historical *deus ex machina*.”

Certainly, this myth is nowhere more forceful than in discussions (e.g., Crabbe 1983; Knight 1973) of the acceptance of Beethoven’s idiosyncratic and alternative style, wherein the composer is portrayed as heroically overthrowing 18th-century aristocratic patronage conventions in order to address his 19th-century public more directly and “forcing” hesitant aristocratic patrons to accept this independence (or, alternatively, the aristocrats who supported Beethoven are lauded for their heroic willingness to reject the aesthetic forms, which otherwise buttressed their social position, in favor of what they regarded as the intrinsic and musicological “superiority” of Beethoven’s work). In fact, Beethoven’s fully fledged middle-class public did not emerge until well after his death, and, as I discussed at the outset of this article, public concert repertory data suggest that the primary public for Beethoven’s work during the 1790s and early 1800s was Vienna’s aristocracy. Moreover, while Beethoven did indeed attempt to alter many of the conventions that characterized the 18th-century composer’s relationship with his (aristocratic) patrons, the

reasons for his actions are far more complex than such mythic accounts suggest (see DeNora 1989 and forthcoming).

Over the past few years, scholars involved in detailed archival research have begun to provide an alternative to the "burgeoning-middle-class/demise-of-the-aristocracy" theory (Moore 1987; Morrow 1989), and this work will be examined in some detail below, as the argument it puts forward is compelling. At the same time, this newer perspective has been developed as a corrective for the "aristocratic demise" theory and, perhaps because of this, it has, at times, tended to overplay its diametrically opposed stance. In that it has focused on demonstrating how aristocrats in early 19th-century Vienna were *no less* dominant in music affairs than were their predecessors a quarter-century before, it has tended to leave two important issues unexplored: first, it has not attempted to look for a potential or perceived (as opposed to a "real") middle-class challenge to aristocratic authority, and, second, it has tended to base its argument on a before-and-after picture of aristocratic authority, following the logic that, because these patrons remained dominant, their position was therefore never subject to challenge. In the remaining portion of this essay, I discuss some of the ways in which aristocratic music patronage—in particular the embrace of the new ideology of "serious" music—can be understood (whether or not aristocrats intended it as such) as helping to conserve aristocratic authority in the face of organizational change. Through this discussion, I hope to assess the extent of the challenge to aristocrats, both in terms of its "real" consequences (i.e., what the new organizational structure facilitated and hindered) and in terms of how it may have been perceived at the time (an approach often disregarded by historical sociologists). Therefore, it is necessary to reconstruct the changing conditions of musical life from the general point of view of these aristocrats. I shall begin therefore with a brief discussion of Viennese musical life during the previous half-century.

#### Viennese Music Patronage in Historical Context

In a sense, Vienna's musical reign began with the accession of Ferdinand II in 1619. By choosing Vienna as his primary residence, Ferdinand made it the *de facto* capital of the empire which, musically, meant that it became one of the centers for imperial ensemble (*Hofkapelle*) performances (Antonicek 1980). Moreover, Ferdinand and his Italian wife, Eleonora Gonzaga, were responsible for forging the first important links between the Habsburg court and musicians from Italy, an association that was to continue for nearly two centuries. Finally, in advocating Baroque rather than Renaissance music ideals (i.e., the Italian *stile*

*moderno*—monody plus basso continuo—as opposed to the *stile antico*, or polyphonic style), Ferdinand helped to dispel the imperial court's 16th-century image as the embodiment of musical conservatism (Antonieček 1980, p. 716).

It was with Ferdinand, then, that the age of “courtly magnificence” arrived. During the next 100 years, under the emperors Leopold I, Joseph I, and Charles VI, the *Hofkapelle* grew so steadily that, by 1705, it numbered 107 members, and, between 1723 and 1740, it swelled to 134 (Moore 1987, p. 98). By 1746, however, Maria Theresa checked any further growth by dividing the imperial *Kapelle* into two organizations: the *Hofoper* (the imperial opera) and the *Hofkapelle* (responsible for all other music production) and this, in turn, led to the decline of the latter organization, which took on a second-class status. By 1822, the *Hofkapelle* was composed of only 20 elderly musicians, most of whom were invalids (Moore 1987, p. 99).

Why so much money was poured into the *Hofkapelle* during the 17th century is a fascinating question, but it is beyond the scope of this study. What is of interest here is why these funds were curtailed during the 18th century and the effect this curtailment had on aristocratic musical life. For it was not merely coincidental that the rise and fall of the *Hofkapelle* preceded and overlapped with the rise and fall of the aristocratic *Hauskapellen*—private ensembles, modeled after the imperial ensemble, that were composed of musically talented domestic servants who performed double duty for their aristocratic employers (see Mahling 1985; Moore 1987; Morrow 1989). The “heyday,” as Hanslick called it, of these ensembles occurred between 1750 and 1775.<sup>9</sup> By the time Beethoven entered the Viennese music world (in 1792), the *Hauskapellen* were already a thing of the past. As the Viennese publisher Count Johann von Schonfeld noted, “It was formerly a strong custom that our great princely houses maintained their own house orchestras, at which they cultivated the leading spirits (*genie*) of music. Such was the case with Haydn. Only, it is now barren for art lovers, whether for a lessening of a love of music or for want of taste, frugality or for some other cause; in short, to the detriment of music, this praiseworthy custom has been lost—one house orchestra lost after another, so that, apart from Prince Schwarzenberg, perhaps no more exist” (Schonfeld [1796] 1976, p. 77; my translation).

<sup>9</sup> These ensembles were linked to individual patrons rather than family dynasties and therefore were continually formed and disbanded during this period (see Abbott and Hrycak 1990). My concern here and below is with the proliferation of the custom of maintaining such ensembles and the eventual decline of this custom.

The Rise of the *Hauskapellen*, the Fall of the *Hofkapelle*, and the Fall of the *Hauskapellen*

So far, two hypotheses have been advanced for the rise of the *Hauskapellen*. The most common is the one to which Reichardt alluded—that the Viennese nobility simply had a “love and knowledge” of music. Recently, an alternative explanation has been proposed by Moore (1987). Following the social and economic historian Hannes Stekl (1975), Moore argues that the increasing popularity of *Kapellen* was driven as much by aristocratic observance of convention and by status consciousness as by interest in music for its own sake. Aristocrats, in order to conform to their role expectations, maintained ensembles commensurate to their financial means and station. As Stekl puts it, “Artists and the public also expected a well-off aristocrat to assume the role of a generous patron, informed collector, appreciative friend of music and painting. Numerous examples of this have been cited by Heinz Gollwitzer” (trans. and quoted in Moore 1987, p. 91).

The rise of the *Hauskapellen*, Moore has argued, can be best viewed as a kind of fad or fashion, in which, first, the upper nobility and, later, other aristocrats, major and minor, followed the example set at court. Proximity to the court (and therefore status) could be demonstrated by aping its practices. Music then, was a vehicle (and, in Vienna, perhaps the most important vehicle, especially given its conspicuous and social nature) with which one could demonstrate, gain, and even, presumably, lose status; it was a primary means by which status was registered. One could argue that these aristocrats did not *need* status, that, unlike many more temporal aristocrats of today, these hereditary princes already *had* status, but to take such a position is to look at the problem through nonaristocratic lenses. During the mid-18th century, the intended audience for aristocratic lavishness was only secondarily the public at large, most of whose members would not be well enough versed in the practices and fashions of the aristocratic subculture to distinguish and appreciate its myriad up-to-the-minute displays. Conspicuous musical consumption, therefore, was not primarily for the benefit of social inferiors; instead, it must be recognized that cultural displays were oriented upward and sideways to those audiences the patron wished to imitate or be aligned with, and to audiences the patron wished to compete with or impress. During the heyday of the *Hauskapellen*, impressing middle-class or minor aristocratic audiences (and thereby distancing themselves from these audiences) was, for high-ranking aristocrats, a relatively minor concern. A letter, for example, from an 18th-century nobleman, Count von Sprock, illustrates the importance of these upward and sideways axes in locating one's status position. The count wrote to his friend, Count Johann Wilhelm

von Thurheim, in 1724 and congratulated himself on his ability, as a mere count, to employ an opera company, while his neighbor, a prince, employed only a lutenist.

I must confess indeed that I have a special fondness for delightful and agreeable music, but this is not the principal reason why I was induced to engage the (opera) company. Rather, after I learned that Princess Schwarzenburg was to take a cure only a mile from here on her husband's estate of Wildschutz . . . I hoped that the illustrious princess would remain in the vicinity for the entire summer. It was decided that the opera singers were to arrive here in the middle of June at the latest in order to entertain her with operas as well as comedies. [quoted in Moore 1987, p. 95]

Thus, the enterprise of music patronage was certainly a socially loaded one, and it seems fair to say that those who took part in it did so for a variety of intertwined reasons. Given that ideals or ends of action are frequently structured by more immediate interests, situations, and available means (Berger 1981; Swidler 1986), it seems reasonable to suggest the following four factors were, at least in part, responsible for the rise of the *Hauskapellen*. First, that higher aristocrats were interested in imitating the imperial court, second, that lower aristocrats were interested in imitating, and thereby "rubbing shoulders" with, the upper aristocrats, third, that the practice became a conventional and expected one as the century progressed, and fourth, that, as a "typical" aristocratic practice, some if not all aristocrats would have found musical activity to be of intrinsic interest but that interest and love of music by no means provided the only impetus for music patronage. This multifactor explanation also serves us better when we come to the issue of the late 18th-century decline of the *Hauskapellen*—especially so when we evaluate the various explanations that have been offered for this decline. For if the primary motivating factor for the proliferation of the *Hauskapellen* was love of music, then it is difficult to explain why, by 1796, as Count Schonfeld observed, nearly all of these ensembles had been disbanded. Was it, simply, "less of a love for music"—one of the possible explanations which Schonfeld put forward? In that case, one would expect that aristocrats would abandon musical life altogether, which was clearly not the case. What was rejected, in other words, was not musical life itself but rather, its previous social organization. As Morrow has observed, "the change did not signify the end of aristocratic patronage of music or the disappearance of music-making in the home. . . . The custom remained the same; only the arrangement was different" (Morrow 1989, pp. 1–2).

At this point, it is necessary to consider the other and still most dominant view of why the *Hauskapellen* were disbanded at the end of the century, for it, too, is congruent with the love-and-intrinsic-interest theory of their initial rise: The downfall of the *Hauskapellen* reflected a

corresponding downfall of the aristocracy, a theory espoused (but never sufficiently explicated) by Deutsch (1965), Hellyer (1980), Raynor (1976), Loesser (1954), and, more recently, Solomon (1977), and Hanson (1985). The gist of this theory is that aristocratic fortunes were lost or significantly reduced during the latter part of the 18th century, and that this caused aristocrats to turn to more diffuse and more socially inclusive forms of patronage, engaging a musician on an event-by-event basis rather than as a member of the household. Thus economic downfall of the aristocracy is posited as the factor that led to the rise of the public concert and to middle-class dominance in musical affairs.

It should be obvious that the hypothesis of an impoverished aristocracy is attractive to scholars attempting to explain not only the decline of the *Hauskapellen* but also the rise of the larger, more public musical forms (the idea being that it led to the "emancipation" of musicians in that it allowed them, finally, to speak directly to a rather anonymous public and, unencumbered by the constraints imposed by polite aristocratic life and their previous role as servants, to produce works of unprecedented complexity and seriousness). Unfortunately, the theory is flawed in several respects. First, any space cleared for full middle-class participation in concert life was by no means occupied immediately; the public—that is, the middle classes—did not actually take control of musical life until much later, if at all, and certainly not before the middle of the 19th century. As Thayer (1967, vol. 1, p. 154) has described the situation, "out of London, even so late as 1793, there can hardly be said to have existed a 'musical public,' as the term is now understood, and in Vienna at least, with its 200,000 inhabitants, a virtuoso rarely ventured to announce a concert to which he had not already a subscription, sufficient to ensure him against loss, from those at whose residences he had successfully exhibited his skill." But perhaps the most compelling challenge to this theory is that it simply does not square with what German-language economic historians of recent years (Stekl 1975) have uncovered about the finances of these old aristocrats. Indeed, of the six sources cited above that espouse this theory, none attempt to elaborate their claims with evidence, though they do cross-reference in some cases. Moore, on the other hand, has shown that there is no convincing evidence in favor of the hypothesis that the aristocrats lost their fortunes at the end of the 18th century, that is, at the time the *Kapellen* were being disbanded (Moore 1987, pp. 79–86). Certainly, the decline in fortunes of Vienna's oldest aristocrats (due to the hyperinflation that began in 1796—see Moore's consumer price index [1987, pp. 245a,b,c] and her data on average annual discounts against the silver gulden for the *bankozettel* [p. 123]), which occurs well after 1800, can hardly have been the cause of the decline of the *Hauskapellen*, a process that was nearly complete,



according to Schonfeld, by 1796, the year in which inflation began. Later, it is true, there is more evidence for the hypothesis that landed aristocrats suffered from the effect of Viennese hyperinflation. But in the case of one early 19th-century bankruptcy, that of Beethoven's patron, Prince Josef Lobkowitz, it would appear that his misfortune was due in great part to spending on a scale *more* lavish than his predecessors.<sup>10</sup> He founded a *Kapelle* in 1802—something to which Countess Lulu von Thurheim's disapproving observation attests: "from morn to night he was occupied by music and squandered a large fortune in order to maintain the most outstanding musicians. . . . He died quite young and left his seven small children nothing but a load of debts" (Landon 1970, p. 155). Even during the early 1800s, however, it has been argued that aristocrats were actually better-off economically than many of their capitalist counterparts, especially after 1809 when the effects of hyperinflation drastically reduced those fortunes not invested in real property (Moore 1987).

As an alternative, Moore has proposed that the decline of *Hauskapellen*, like their earlier rise, can be understood as a fashion, and, further, that both rise and decline must be understood in context of the rise and fall of the imperial *Hofkapelle*. Specifically, her argument is that, if we recognize the whole *Kapelle* enterprise as a status-conscious endeavor, we can then understand the rise of the *Hauskapellen* as a response to the court's cultivation of such an ensemble. Correspondingly, the court's subsequent discontinuation of the ensemble when it was no longer more lavish than those of the highest aristocrats followed the principle that, "a particular source of prestige, when adopted by a given social class quickly lost its prestige among the next higher social class" (Moore 1987, p. 100). Thus, she argues, the imperial court became less interested in supporting its *Kapelle* when it could no longer outshine those of the aristocrats, and the aristocrats, in turn, became less interested in maintaining a practice that the court no longer upheld (hence Moore's argument that the *Kapellen* were disbanded because they were no longer fashionable).

Furthermore, as the *Hauskapellen* became fashionable, they were imitated by lower aristocrats who, if they were unable to sponsor orchestral musicians and singers, sponsored *Harmonie* (wind bands) instead, which eventually became known as the "poor man's *Kapellen*." By the 1780s (when the decline of the *Hauskapellen* was well under way), such ensem-

<sup>10</sup> It is possible therefore, that economic constraints were indeed in part responsible for the eventual extinction of *Kapellen*, not for the initial turnaway, but rather, for the subsequent proliferation of the new organization of dilettantism because, as dilettantism took over (and as music became professionalized), *Kapellen* grew more expensive, and, perhaps, patrons were then less likely to spend money on them.

bles were relatively common among minor aristocrats. By this time, then, there were two good reasons for a status-conscious aristocrat to disband his/her *Hauskapelle*: the court had withdrawn from the "competition" and the support of a *Kapelle* was no longer an uncommon, and therefore distinctive, practice. Though the higher aristocrats certainly could have distinguished themselves from lower aristocrats through even more ostentatious *Kapellen*—certainly, a full *Kapelle* was more magnificent than a wind band—the point is that, once the court had dropped out of this competition, the major reason for having a *Kapelle* in the first place was lost. Thus, there was little point in carrying on a practice which, at one end, the court had disbanded and, at the other, minor aristocrats were increasingly taking up. In any case, by dropping a custom that was no longer useful and by continuing to maintain an active interest in patronage of music through the new dilettante salon forums, high aristocratic music patrons paved the way (albeit unwittingly) for increasingly broad participation in music affairs.

#### THE SOCIAL LIMITS OF THE CHANGE

After the *Kapellen* Era: Just How Much of a Challenge Was the Rise of Salon Forums?

Needless to say, additional work is required before any explanation of the fundamental transformation of the organizational basis of musical life in Vienna can be fully accepted. When we consider, for instance, the documentary materials available to scholars in some other areas, the evidentiary basis for this investigation remains comparatively scant. The resources for the study of both the period after 1800 (the Vienna of middle-period Beethoven and of Schubert) and before 1790 (before Mozart's death) are more extensive, and these eras have received far more attention from scholars than have the years between 1790 and 1800. Any inferences to be drawn, therefore, must remain tentative, though on the basis of the evidence that proponents of these respective theories have marshaled, the conclusion that "nowhere did the aristocracy come tumbling down" (Moore 1987, pp. 47–88) certainly seems the stronger of the two (though other theories could be proposed; frugality on the part of aristocrats even if not genuine hardship, for example). In any case, what does seem fairly certain is that music was a primary medium for acquiring and demonstrating prestige, and that the importance of this medium, once participation in music affairs began to broaden socially, was only intensified. Admittedly, the court's withdrawal from the support of instrumental music diminished the relevance of attempts on the part of the higher aristocrats to symbolically "usurp" the court's position as the

most lavish of music patrons; there was little point, in other words, in maintaining the custom of the *Hauskapellen* once the imperial ensemble had begun to languish. Simultaneously, however, the lower aristocratic and upper-middle-class entry into musical life necessitated an increasing emphasis on *musical* forms of exclusion if aristocrats were to remain distinct as musical leaders. In the remainder of this article, therefore, I shall consider the ways in which the new social organization of musical life, which resulted from the decline of the *Hauskapellen*, affected the conditions under which music could be useful in delineating status. In particular, I will explore the problems that the new organization posed for music's traditional and previously exclusive patrons—the old aristocrats.

As was noted above, the Viennese aristocrats by no means discontinued their involvement in musical affairs after the decline of the *Hauskapellen*. Aristocrats continued to support music through a variety of events such as salons, after-dinner music, and party music (see Morrow [1989] for an excellent portrait of the private forms of high cultural Viennese musical life of this time) as well as larger performances such as the oratorios produced by the GAC. This newer, more diffuse form of organizing patronage (of which the GAC is an example) seemed, on the surface at least, to be compatible with the old form of musical life in that the events were controlled by old aristocrats and remained, for the most part, private affairs (the GAC oratorios, for example, were performed at Prince Schwarzenberg's, and only if the performances were deemed successful were they then produced for a public audience).

But in comparison with the older organizational structure in its heyday (the aristocratic sponsorship of permanent domestic ensembles), the newer structure did not really provide the same sort of foundation for continued aristocratic distinction, and, as the century waned, it gave rise to some changes, two of which must now be discussed. The first of these was that the new organizational base was conducive to an increase in independent musicians, most of whom remained dependent on teaching (and especially piano teaching) as their primary source of income (Morrow 1989; Loesser 1954; W. Weber 1978; Moore 1987). Teaching was important as a way of earning a living at this time (some teachers were paid with room and/or board instead of money) since there were many aspiring dilettantes but not yet much scope for entrepreneurial concert activity. It is indeed through this shift from the *Hauskapellen* to dilettante forums that the rise of the emancipated musician was facilitated (see Salmen 1985; Mahling 1985), though the change was much more gradual than the "aristocratic demise" theorists have suggested, and, in fact, it had more to do with the organizational basis of patronage than with the independent rise of the middle class. Along with this, the status of some

musicians began to rise as they began the slow transition from servants to autonomous professionals, and, indeed, 19th-century *Kapellen*, where they did occur, tended to be composed of professional musicians rather than servants and were therefore more expensive to keep (Moore 1987, p. 105). This transition was consequential for the position of aristocratic patrons, and I shall return to it below when I discuss the obstacles to public musical life in Vienna and the ways in which aristocrats were able to retain control over the serious music ideology.

The second important change engendered by the new organizational base of patronage was (as has been discussed at the outset of this essay) an increase in the number of public concerts and also increased upper-middle-class and "second society" (ennobled members of the upper middle class) participation in privately sponsored music affairs. Now, with less of an economic barrier to music participation, those who would not have been able to keep *any* form of *Kapellen* could participate in musical life through the purchase of a subscription ticket or through hosting a concert. A cursory examination of Schonfeld's 1796 list of music world participants for instance, shows that about 30% were middle-class amateur musicians or salon hosts (see DeNora 1989, pp. 56–57). Thus the aristocrats who, at one time, would have been *exclusive* music patrons, now found themselves in a position where they actually shared (or—and this may have been equally important—*risked* sharing) patronage rights over musicians not only with minor aristocrats and new aristocrats but now also with members of the middle class. While most middle-class participation occurred in public (for the simple economic reason that private music sponsorship—even on an event-by-event basis—was expensive), some members of the middle class also sponsored their own salons. As Morrow has observed, "The practice of giving formal private concerts in the home began to trickle down the social scale, with the lower nobility and the wealthy middle class assuming an increasingly active role. By the end of the century, the musical salon had become firmly entrenched in the Viennese cultural world, so that all segments of the population who had the means to participate in the city's cultural life at all could have had access to at least one or two musical coteries" (1989, p. 2).

### The Extent and Quality of Middle-Class Participation

All of this leads to the question currently being debated by music historians of this period: To what extent did this additional participation constitute a significant challenge to aristocratic leadership in music affairs? The most recent research has suggested that the actual participation and power of the middle class and second society in musical affairs at the

end of the 18th century was still relatively insignificant. For one, the private concerts of the old aristocracy, the new aristocracy, and the middle class appear to have been carried on in separate, partially parallel streams. The second aristocracy, though they could frequently compete with the old aristocracy in monetary terms, were only rarely admitted to its inner circles (Moore 1987, p. 61). Moreover, though some members of the middle class were indeed present at aristocratic salons, it is necessary, as Morrow has pointed out, to

distinguish between the association of bourgeois and aristocrats as performers and their relationship as members of the audience or as a social group. Musicians had been playing beside their noble employers for centuries without doing any damage to the class system, so that the collaboration in performance does not necessarily signal social change. A mixing of classes on the side of the audience would be a much better indication that a process of democratization was occurring, for though aristocrats necessarily had to associate with middle-class musicians in performance (on whatever basis), they were in no way obliged to fraternize with bourgeois music lovers by inviting them to concerts or by attending concerts in humbler homes. Whether or not they chose to do so is a difficult question to answer, but the diaries of two people who consistently attended concerts—the nobleman and socialite Count Karl von Zinzendorf and the middle-class accountant Joseph Carl Rosenbaum—indicate that the social boundaries were maintained in the various salons. [P. 24]

Indeed, it seems that aristocrats tended to play the more expensive (and fashionable) pianoforte, while middle-class participants played the less costly (and less prestigious) strings and winds (see table 4). Thus, to some extent, it is meaningful to speak of a social distribution of personnel, which suggests, therefore, that middle-class participants and aristocrats were not (even when participating in the same events) on equal footing.

The middle class, moreover, was at this time, relatively disparate (Weber 1978), and to some extent it is problematic to consider it a class at all. Those participants from the middle class, and especially those who attended salons, were members of the upper middle class, for example, wholesale merchants, bankers, and higher government bureaucrats. According to Moore's calculations, contra to Loesser's statement that "there was a piano in every household" at this time, only members of the old aristocracy, the second aristocracy, and the rich bankers would have been able to purchase a piano with financial ease. Most middle-class aficionados were, on the whole, simply not rich enough to participate regularly in musical life (see Moore 1987, chap. 1; Morrow 1989, p. 2).

Thus, these recent studies have demonstrated that the democratization of musical life occurred gradually, and that, for the most part, the salons were not instruments of social change but instead tended to mirror the structure of Viennese society. In this most recent view, then, the aristo-

TABLE 4

## VIRTUOSO AND AMATEUR MUSICIANS BY INSTRUMENT AND SOCIAL STANDING

| Instrument            | Total | Aristocrats | Middle Class | Professional Musicians |
|-----------------------|-------|-------------|--------------|------------------------|
| Fortepiano .....      | 51    | 30 (14)     | 9 (4)        | 12 (6)                 |
| Violin .....          | 34    | 9 (4)       | 16 (8)       | 9 (4)                  |
| Voice .....           | 37    | 15 (7)      | 16 (8)       | 6 (3)                  |
| Klavier* .....        | 23    | 7 (3)       | 7 (3)        | 9 (4)                  |
| 'Cello .....          | 12    | 2 (1)       | 7 (3)        | 3 (1)                  |
| Flute .....           | 7     | 4 (2)       | 3 (1)        | 0                      |
| Oboe .....            | 6     | 3 (1)       | 2 (1)        | 1 (.5)                 |
| Organ .....           | 2     | 0           | 0            | 2 (1)                  |
| Viola .....           | 2     | 2 (1)       | 0            | 0                      |
| Clarinet .....        | 2     | 0           | 1 (.5)       | 1 (.5)                 |
| Guitar .....          | 1     | 1 (.5)      | 0            | 0                      |
| Mandolin .....        | 3     | 2 (1)       | 1 (.5)       | 0                      |
| Zither .....          | 1     | 0           | 1 (.5)       | 0                      |
| Glass-harmonica ..... | 1     | 0           | 1 (.5)       | 0                      |
| Bassoon .....         | 1     | 0           | 0            | 1 (1)                  |
| Unknown† .....        | 27    | 10 (5)      | 5 (2)        | 12 (6)                 |
| Total .....           | 210   | 85 (40)     | 69 (33)      | 56 (27)                |

SOURCE.—This list is derived from Schonfeld (1976) chap. 2, "Virtuosen und Dilettanten."

NOTE.—The figures in parentheses refer to percentage of the group at large. The figures not in parentheses represent the actual numbers of performers by instrument and social status.

\* This is a generic term for keyboard instrument and may include fortepiano, harpsichord, etc.

† In most cases, it can be assumed that the professional musicians whom Schonfeld does not identify by instrument played either klavier or fortepiano since they are identified as composers.

crats are depicted as continuing to be the unchallenged leaders of musical life, in spite of the organizational changes that that life had recently undergone, and the limited democratization of musical life that this base engendered is dismissed as relatively insignificant. The old aristocrats continued to dominate musical life, now as the city's "most brilliant dilettantes" (to quote from Hanslick once again). On the surface at least, it seemed that musical life, in spite of its altered organizational base, remained essentially unchanged, though perhaps capable of offering to any given patron more variety; he or she heard less of his or her own house ensemble and house composer's works. To embrace this view, however, is to miss one of the most sociologically interesting features of this period. In concluding that the salons were not instruments of social change, current music scholars have missed the ways in which the salons (and the music ideology with which they were associated) were not merely *neutral mirrors* of social structure but were, rather, *instruments* of social *stability*.

## THE IMPLICATIONS OF THE CHANGE

## The Changing Meaning of Music Patronage

Though aristocratic leadership in music affairs remained constant over time, the substantive *content* of that leadership changed. As was described briefly above, the sources of distinction shifted from simple quantitative expenditure to qualitative demonstrations of discernment and “good taste” and a heightened emphasis on the appreciation of “greatness” according to which the notion of master composers was constituted. During the 1790s and early 1800s, in other words, we can trace, through public concert repertoires, contemporary reports of salons, critical discourse, and so on, the expansion and modification of the taste for, as the GAS director, Baron Gottfried van Swieten put it, “a few great men”—the very ideology that, though always located among aristocrats, was, during the late 1780s and early 1790s, subscribed to by only a minority of patrons. The new ideology was articulated and celebrated during the early 1790s and 1800s in official journals (particularly the aristocratically associated *Allgemeine Musikalische Zeitung*) in ways that marked it as the current and correct taste with which to be associated. To praise Beethoven, therefore (and Beethoven was indeed the subject of much praise during this time—see Wallace [1986] and DeNora [1989]), was simultaneously, albeit implicitly, to praise his patrons who—as evidenced by his dedications, contemporary reports (see, e.g.: Czerny 1956), and repertory study—were primarily aristocratic. Similarly, to praise the symphonic and chamber works of Mozart—many of which were deemed, during the 1780s, too complex to be really “pleasing”—was to praise the concert hosts who programmed them, again Vienna’s old aristocrats. Thus, through the pursuit of the “greatest” of composers (whose status was dependent on recognition by aristocratic, powerful patrons), Vienna’s social aristocrats could themselves be identified as aristocrats of taste.

Because scholars have not yet made this music-ideological shift problematic in its own right, interest in the sorts of factors that could help to account for the shift has been negligible, and inquiry into the mechanisms for patronage distinction—specifically into the way in which the nature of these mechanisms shifted over time—has generally been bypassed in favor of accounts that celebrate the change. As William Weber (1986) has put it, music scholarship often results in tautological confirmation of the canon’s biased principles. We are left with few tools for making visible the ways in which and the extent to which the aristocratic embrace of the new idea of musical greatness may have served as an attempt to maintain status in the face of the loss of exclusive control over the traditional institutional means of authority in music affairs—a way of recon-

stituting their traditional social identity according to innovative cultural means.

To make this aspect of their action visible, it is necessary to distinguish more clearly between the short-term consequences and the potential long-term implications of the change in the organization of music sponsorship and, along with this, attempt to assess the ways in which aristocrats may have experienced these changes—how, and to what extent, they perceived these effects. So far, discussions of the sources of and mechanisms for aristocratic distinction in Viennese musical life have remained theoretically hazy. Music scholars have implicitly tended to conceive of aristocratic authority in its active cultural configuration rather than in terms of its cultural underpinnings (i.e., the institutional means according to which such cultural authority is maintained over time) and have thereby ignored the ways in which aristocratic control over the means of the production of musical life was being eroded. What this has meant, then, is that the short-term effects of the change have been conflated with the long-term implications: the former (i.e., the apparent absence of any significant challenge to aristocratic authority) precluding consideration of how the altered structure may have posed—and indeed, *did* pose—a potential threat to aristocratic authority over the long term.

Indeed, the short-term social broadening that did occur was, as I have just discussed, limited. The potential long-term threat to aristocratic authority, however—the erosion of the institutional means for distinction—should now be relatively clear: if, under the new system, distinction via patronage had continued to be constituted solely through quantitative participation, then the ability to achieve this distinction was deregulated to the extent that it was, in principle, opened to anyone who could afford to purchase a subscription to a concert or to host occasional private concerts. In this way, the musical means through which social exclusion could be achieved were eroded. One can see here, incidentally (and I shall discuss this below), that the dynamics now permitted, at least in theory, the articulation of a professional rationale on the part of musicians.

The question that remains, then, is whether any of the old aristocrats who embraced the new music ideology were actually *aware* of this potential threat. Unfortunately, there is no explicit testimony from the aristocrats themselves that acknowledges that they perceived their traditional authority to be under threat (the closest example consists of references to musical “decadence”), though to expect them to declare or even to hold such an externalist view of their own situation may be to paint a far too rational portrait of aristocratic consciousness. Nonetheless, it is worth returning once again to the cultural context of aristocratic music sponsor-



ship in order at least to consider the issue of just how strategic their aesthetic entrepreneurship may have been.

### The Meaning of the Change in Cultural Context

Late 18th-century Viennese society was rigidly hierarchical (Moore 1987, p. 58) and often perceived as "haughty" by foreign observers (Landon 1988, p. 24). Its members, and most especially the aristocrats, were keenly aware of social gradations, and no doubt even the most subtle violations of this hierarchy would have been registered by them. On the whole, the documentary evidence from a variety of sources supports this: according to Countess Lulu von Thurheim, for example, Princess Lichnowsky (the wife of Beethoven's foremost patron and a daughter of the famous musical patron Countess von Thun) could, "with a gesture, with a scornful smile, or merely by means of a slightly disparaging remark, destroy someone socially" (quoted in Landon 1970), and Reichardt (1915) emphasized in his observations on Vienna just how difficult it was for foreign nobility, even of very good houses, to penetrate the inner circle of this world. Indeed, we have already seen the ways in which the structure of salons reproduced these social barriers. In criticizing the exaggerated 20th-century report that "a piano could be found in every house in late eighteenth century Vienna," for example, Moore has observed that "reports of drastic changes by contemporary observers should be evaluated carefully. In these rigidly hierarchical and traditional societies even quite small increases in size or influence of the middle classes tended to register disproportionally large shock waves among observers" (1987, p. 58).

It seems reasonable then, that Viennese social structure was not significantly altered during the final decade of the 18th century and early 19th century, but that this "nonchange" occurred in a cultural-meaning-system (Mehan 1986) climate of hypersensitivity to change.

Although the number of ennoblements rose during the second half of the 18th century,<sup>11</sup> the Viennese population at large grew at a higher rate (see Moore 1987, pp. 76–77). While Moore has argued that this net decline of ennoblements to the population at large would have made ennoblements appear less common, her statement is largely irrelevant in this discussion since the old aristocrats would have been unlikely to have attended to how, in relative terms, the growing number of new nobles actually represented a shrinking proportion of aristocrats to the general

<sup>11</sup> The average for annual ennoblements was 25 for the years 1701–39, 36 for 1740–80, 40 for 1781–89, 66 for 1790–91, and 47 for 1792–1835 (see Moore 1987, p. 76).

population. What they would have been most likely to have registered was how this growing number appeared in relation to themselves, in which case its significance would have been magnified. Indeed, scholars of the history of the Austrian aristocracy during this period have observed that the old aristocrats were actively concerned with distancing themselves from their newly ennobled counterparts (Stekl 1975, 1978; Moore 1987). Admittedly, no matter how rich, most ennobled bankers—let alone members of the upper middle class—were still perceived as second-class aristocrats (Moore 1987, pp. 83–84). More important, however, as time went on, the mechanics of the new organizational base of music patronage made it possible for the second society and the middle class to lead more or less the same sort of musical life in that, technically, they could (and frequently did) patronize the same musicians and hear music by the same composers (albeit at different times and in different places), as long as they could afford to do so, which, increasingly during the 1790s, they could. (This was achieved through attendance at public concerts or through privately sponsored salons, either of which were considerably cheaper than supporting a *Kapelle*.) When we consider the importance of musical sponsorship for the constitution of aristocratic identity, as evidenced in the above discussion of the rise and fall of the *Hauskapellen*, it becomes easier to appreciate some of the ways in which late 18th-century aristocrats risked, under the new system, being dispossessed of the primary means for the maintenance of their identity as leaders of cultural life. Given that it was during this period that aristocratic musical life began to be characterized by the concern for serious music, it seems plausible that aristocrats were conscious of the implications of the change, at least on some level.

Their problem was exacerbated, moreover, by the new “free-lance” musicians who now had an economic interest in widening their circles of admirers and in furthering their reputations. Thus there was, at this time, an at least incipient bias toward professional autonomy. Indeed, Beethoven himself gave voice to this sentiment in a letter to one of his publishers, Franz Hoffmeister, in 1801: “There ought to be in the world a *market for art* where the artist would only have to bring his works and take as much money as he needed” (Anderson 1961, letter 44, p. 48; emphasis in original). Why then, was Beethoven clearly not interested, as he reportedly told one newly ennobled concert organizer (Thayer 1967, vol. 1, p. 398), in cultivating the musical public at large, that is, those who sat in the galleries? In answering this question, we also gain insight into the issue of how it was that Vienna’s old aristocrats were able to monopolize serious music consumption for as long as they did.

It would, of course, have been destructive to aristocratic authority if the impetus toward public musical life had been encouraged (as it was,

for instance, in London, where the aristocracy was not so distinctly set apart from the upper middle class and where the distance between these two groups was mediated by the gentry) since that would have diminished aristocratic leadership by transferring control from patron to musician/entrepreneur (or, less threatening, to public concert organizations). Certainly, then, we may say that Vienna's aristocrats had an interest, whether they were aware of it or not, in impeding the full-scale public and commercial development of musical life by continuing to conduct most of their musical affairs in private salons, and indeed, private music making did hinder the growth of a public musical life in Vienna (see also Morrow 1989, p. xv). Although the number of public concerts did increase and facilitated the partial entry of middle-class and second society into musical affairs, this increase is relatively small in comparison with the thriving concert life of London.

More important, because musical life was dependent on the activities of individuals (rather than bureaucratic or commercial organizations), employment opportunities for musicians were far less regular, which meant a particular hardship for musicians after the *Hauskapellen* were disbanded (Morrow 1989, pp. 63–67; Moore 1987). Certainly, for a composer like Beethoven, it was advantageous to comply with aristocrats since the institutional mechanisms for commercial musical life (such as were present during this time in London) were not yet present in Vienna, and aristocratic, private support provided the kind of financial stability that most other composers during this transition period were unable to find. Aristocrat-sponsored public concerts often featured ticket prices that were far higher than prices for nonaristocratic events—for example, at Beethoven's 1803 benefit, tickets were 12 times the normal prices (see Moore 1987, p. 319). In this way, an event could (whether or not the aristocrats intended it) remain exclusive while simultaneously providing a substantial benefit for the musician. Thus, the absence of a highly articulated organizational basis for commercial musical activity in Vienna maintained aristocratic monopoly over the consumption of serious music. For a composer like Beethoven, there would have been little economic incentive, during the years around 1800, to cultivate Leopoldstadt audiences at the expense of his richer aristocratic patrons and the relative security and performance opportunities they were able to provide.

Beyond this organizational barrier to serious music consumption, however, it seems fairly unlikely that most members of the middle class would have been particularly interested in or even aware of the newly fashionable musical ideology. Certainly, the Leopoldstadt programs (in particular their emphasis on spectacular musical forms and light operetta as discussed above) suggests that this was the case. Beethoven, and the newly reconstituted Haydn and Mozart, would, at this time, have been

beyond the horizons of most middle-class musical experience in much the same way that most "connoisseur" or minority tastes often are today. The point, however, is that those members of the middle class who *did* care, who, as Thayer put it, had been waiting for an opportunity to witness Beethoven's prowess for themselves, and who were most attuned to current musical events—the likely readers of the *Allgemeine Musikalische Zeitung* and of Schonfeld's (1976) *Jahrbuch* and the salon hosts—were the ones who posed the most immediate threat of social pollution. Because so much serious-music concert activity occurred in private, these nonaristocratic aspirants to "aristocratic" taste were, *de facto*, relegated to the status of "followers"; the presence of such followers reflexively constituting those who did have access to the private world of advanced taste as "in the forefront" and those who did not care about access as not in line with "legitimate" taste. A more definitive reading of these issues will require further specific and comparative research on the topic of music consumption.

## CONCLUSION

Distinction, in modern societies, is (as Bourdieu [1984] and others have persuasively argued) constituted through a social distribution of differences, the values of which are ranked hierarchically (thereby allowing "symbolic violence" to occur [Bourdieu 1984]) and these rankings are homologous with hierarchies in other (e.g., economic, political) realms. While the Viennese aristocrats by no means lost their privileged and distinguished position during the late 18th and early 19th centuries, the basis for their distinction was being eroded by the mechanics of a new form of patronage organization. Their identity as distinct leaders of musical life, however, was reconsolidated through a music ideology that celebrated extraordinary talent. To perpetuate, therefore, the myth that Beethoven's acceptance—and the acceptance, more generally, of an ideology of serious music—signaled and/or facilitated the straightforward "democratization" of musical life (and to hail this movement uncritically as progress) is, above all, to legitimate the charismatic ideology according to which the new forms of distinction were constituted. In music and in Vienna during the later 18th century at least, the charismatic ideology was allied with the preservation of an at least potentially imperiled elite; indeed, when introduced as a means of identifying and sorting musical talent, it was capable of reflecting back on the musical sponsors themselves, reconstituting them as an aristocracy of taste.

That these aristocrats were *consciously* attempting to consolidate what they perceived as the eroding basis of their cultural authority remains necessarily subject to debate. What we can say, however, is that they

were involved in a course of action which, at least *de facto*, secured that position from threat and, in fact, enhanced its distinctiveness. Their subsequent brilliance as connoisseurs, in other words, was gauged according to criteria which they themselves pioneered. In light of the rigidly hierarchical Viennese cultural climate, the previous and traditional importance of music in the constitution of aristocratic identity, and given the ways in which these aristocrats were indeed active in securing their distinctive position by redefining the meaning of musical life, it seems at least feasible that they were aware that their leadership (and through it, their social position) was in danger of being eroded. In any case, the new ideology of musical life, which did not simply evolve but was adopted and disseminated at a specific time and in a specific place, resulted in the continued and, if anything, heightened identity of these aristocrats as premier patrons with advanced musical tastes, at least for a time.

Ultimately, the strategy's effectiveness was short-lived. By around 1816, the constituency for "serious" music in Vienna dwindled in proportion to the growing constituencies for the lighter, more explicitly commercial music: the waltz and the virtuosic style (Hanson 1985). One reason the aristocrats ultimately failed in sustaining a serious-music ideology may be that, unlike the case of the Boston aristocrats (DiMaggio 1982), they did not attempt to create a corresponding organizational base for the new musical ideals until relatively late (in 1812 with the founding of the *Gesellschaft der Musikfreunde*). As was observed above, aristocratic musical life was carried on primarily in private and—in the face of music's slowly broadening public and the new free-lance musicians' concerns for broadening these publics even further—the salons and occasional public concerts provided rather slender institutional means for long-term domination of musical life. Because of this, in Vienna, the cultural power of great music, effective in the short term, was substantially diminished during the 19th century. Nevertheless, what is important, of course, is that this ideology received its first extended articulation in Vienna, and that it was subsequently drawn on, during the 1820s and beyond, as a resource by coalitions of aristocrats and members of the upper middle classes who elaborated and revised it as a vehicle for constituting a new elite (W. Weber 1986; DiMaggio 1982). Thus, the early Viennese articulation of the notion of great composers and serious works is important in the long run because of its ideological legacy.

More broadly, I hope that this case study of Vienna's aristocrats has helped to illustrate some of the ways in which position in a status order can be conceived in terms of the social processes according to which capital (as a mechanism that links forms of interaction to the reproduction of systems of stratification) is transformed and kept current over time and kept current in the face of organizational, economic, and other types

of change. In this way, perhaps, we can extend our understanding of the relation between cultural capital and reproduction in dynamic rather than static terms. This extension of understanding might also help clarify the more anthropological conception of culture, sometimes implied by reproduction theorists, in ways that allow us to note the types of activity and contexts within which cultural structures are themselves created and the processes through which "stability" is maintained.

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# Critics and Publics: Cultural Mediation in Highbrow and Popular Performing Arts<sup>1</sup>

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That critics mediate the relationship between artworks and publics has often been suggested but never adequately tested. Cultural capital arguments lead to the expectation that the mediation process operates differently for highbrow and popular genres, while the idea of cultural convergence does not predict such an effect. Data on 624 shows and 1,204 primary reviews from the Edinburgh Festival Fringe are used to investigate the relationship between reviewers' evaluations and audience attendance. The results show that positive reviews are associated with greater audience participation, net of other factors, but the effect is limited to highbrow performance genres such as theater. Critics do not have the power to "make or break" shows. The visibility provided by reviews is more important than their evaluative function. The findings support the idea that the operative aesthetics in popular and highbrow genres are distinct, and critics are important only in the latter.

They can scarce be called critics who must hear and read a thing before they will venture to declare their opinion. Anybody can do that. [JOHN GAY, *Rehearsal at Gotham*]

In the wee hours of the morning the director of a small experimental theater company picked his way down the steps of Fleshmarket Close off the High Street in Edinburgh. He was anxious to pick up the first edition of the *Scotsman* where he hoped to see a review of his show. Before long, another man appeared to halt, then proceed reluctantly down the steps—the director of the Royal Lyceum Theatre, which had opened a show the same night. "Just taking the air," he smiled, "same as you."

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The institution of reviewing has long been recognized as having a special significance for the performing arts. Actors, directors, sponsors, and producers save specimens of critical writing for celebration, promotion, and reminiscence. A good notice is occasion for rejoicing and provides motivation for the ensuing performances. A bad one elicits execrations and depression—and sometimes initiates the search for new employment. Most participants in the performing arts, a good many critics, and sociologists as well (Levy 1988, p. 137), hold that reviewers have the power to make or break a show. Others doubt these effects.<sup>2</sup> Although sociologists are quick to admit the theoretical importance of criticism as an essential part of the institutional context of modern art worlds (Becker 1982, pp. 111–15; Griswold 1986, p. 25), empirical evidence regarding its effects is virtually absent: the idea that reviews mediate the relationship between performers and audience has never been put to an empirical test.<sup>3</sup>

In this article, I examine the relationship between critical reviews and audience participation in the performing arts, focusing on two questions. First, is there an association between the kinds of reviews received by a show and the size of the audience that attends it? Second, to what extent is there evidence of differential effects (in Bourdieu's [1984] terms, "distinct sensibilities") for different performance genres? Using the 1988 Edinburgh Festival Fringe as a research site, I estimate models that predict attendance for 624 shows with 1,204 primary reviews.

### CULTURAL OBJECTS AND THEIR RECEPTION

Much recent interest in the sociology of culture engages its explicit end products (Wuthnow and Witten 1988; Blau 1988a). In the arts, the history of an object or population of objects cannot be viewed simply as a "reflection" of social structure (Peterson 1979) but must incorporate elements of its production context (Hirsch 1972; Peterson 1976; DiMaggio 1987).

*Reception.*—The reception of a cultural object is a complex analytical phenomenon, involving consumption, incorporation or rejection, and diffusion over time and space. The reception process varies in terms of interpretation, impact on other fields, degree of canonization, and endurance (Griswold 1988, pp. 10–16). Perhaps the most significant

<sup>2</sup> Elizabeth Burns (1972) writes that, while the critic had an important educative function at one time, she doubts that modern critics have much impact.

<sup>3</sup> Reviews have been used (McGranahan and Wayne 1947) as indicators of popularity and success, but there is no justification for this apart from the absence of other measures.

dimension—certainly from the standpoint of producers, backers, and artists—is market success. To what extent is the production attractive to consumers? At least in some major theater markets (Broadway, London's West End), it is not clear that there are other indicators of reception (Griswold 1988, p. 155; Passell 1989). The audience, not the stars, or the critics, or the promoters, is the final arbiter of the success of a show.

*Consumption.*—Why do people become consumers of art? Part of the answer is class related: the possession of money and leisure time has been an important factor in audience composition since the Renaissance (Griswold 1986, pp. 26–30). Audience studies continue to show that education and income are related to attendance at theater (DiMaggio and Useem 1983), owing to restrictions rooted in both the ability to purchase culture and the ability to understand its objects (Gans 1974, 1985).

Another set of factors relates to accessibility and visibility: one cannot attend performances if there are none about or if one does not know about them. Judith Blau demonstrates the importance for arts attendance of living in the city center (1988*b*). Advertising plays a role through producing awareness and interest. In the early French theater, audiences were attracted through harlequins and acrobats in the public square (Wiley 1960). Not long after, the poster came into use, followed two centuries later by the more elaborate apparatus of television, radio, and print media.

In addition, there are matters of prestige involved: status climbing and interactional rewards (or dangers). One's presence at the opera or theater became a fashionable extension of "salon" life and a symbol of upper-class taste as early as the 17th century (Lough 1957) and continues to be so today (Gans 1974).

While these factors help to explain certain general types of cultural consumption, they do not tell us anything about why particular performances are selected rather than others. Since unpopular performances seldom go any further—and virtually never become parts of the cultural canon—it is important to understand the conditions that provide them with an opportunity for continued livelihood. Here *influence* or *distributed evaluations* may play an important role. One may attend performances because of the direct recommendations of one's associates (word of mouth) or on the recommendation of authoritative assessors. My study focuses on the special role of the critic in the determination of market success.

## CULTURAL MEDIATION AND THE CRITIC

Becker distinguishes between "aestheticians" who develop the premises and arguments used to justify classifying works as "art" and "critics"

who apply aesthetic systems to the evaluation of specific works and artists (1982, pp. 131–64). There are two reasons why this is not an adequate conception of the critic. The first is Becker's own: when an established aesthetic theory does not provide legitimation, institutional activities such as criticism proceed in its absence. Second, the historical development of criticism suggests a broader view.

*Phases of criticism.*—Three phases may be distinguished in performing arts criticism, all of which are reflected in the history of the theater. The *interactional* phase before the late 17th century, although characterized by a lack of differentiation between spectators and critics, did not involve the absence of criticism. Indeed, gallants and rival playwrights paid two shillings for the right to a stool on the stage—not simply because they could be readily seen but because their criticism could be offered directly to the players during the performance itself (Smith 1953; Burns 1972, pp. 187–89; Griswold 1986, pp. 111–12). The practice of note taking during the performance originated as a means of inscribing unrehearsed lines as players slandered patrons. A critic was simply “anyone who could make his opinions or abuse heard during the performance” (Burns 1972, p. 189).<sup>4</sup>

A second, *promotional*, phase is linked to the publication of newspapers (Kammerman and Martorella 1983). The role of the critic shifted from the abusive to the celebratory, as critics became advocates of dramatists and performers. In part, their concern was to justify the theater against accusations of immorality (Burns 1972). General notices at the end of the 17th century were replaced in the 18th by newssheets devoted specifically to theater comment and criticism (e.g., Richard Steele's *The Theatre* [1720]). These critics were members of the theatrical community, speaking as colleagues of the actors and playwrights, acting as public relations officers for the companies, and sometimes even reviewing their own plays (in the form of “puffs,” or planted reviews; Griswold 1986, p. 110).<sup>5</sup>

The *modern* phase of criticism emerged gradually as critics began to take an independent evaluative role—comparing, opining, teaching, and recommending—in ways not necessarily to the liking of the performers. The content of criticism has varied from an interest in the play itself and its social relevance (Levy 1979, pp. 180–82), to the quality of the acting (Burns 1972, pp. 197–98), to the reception of the audience (Griswold

<sup>4</sup> In this period, the main way of influencing the taste of an audience was to pack it with one's friends (the *claque*, or paid applauders) or have the playwright himself go to the parterre and stand with the public, hoping to curry favor (Wiley 1960). See Burns (1972) on stuffing the gallery in English theaters.

<sup>5</sup> A practice that is occasionally observed today, although seldom with the collusion of editors.

1986, pp. 171–72). By the 19th century, criticism could be considered a profession, practiced by the man of letters who laid claim to a superior knowledge of the play, the performance, and the aesthetic context of the production. With the explosion of performing arts and artists in advanced industrial societies, we can begin to distinguish a *contemporary* phase characterized by a greater diversity in the backgrounds and interests of critics, which can range from the journalistic to the professional.

*Reviewing.*—Critics may be viewed as gatekeepers (Hirsch 1972), as intermediate consumers (Griswold 1987), or as mediators of audience response. A general model of the review process has been sketched by Griswold (1988, p. 12). A cultural object is received by a reviewer with a particular “horizon of expectations” about the kind of object it represents (Jauss 1982). Interpretation and framing of the perceived object form part of the reviewer’s brief, the production of a new cultural object (the review) for an intended audience (readers). Receivers of the review are themselves involved in a process of interpretation and framing—but this may or may not include the subsequent experience of the reviewed object. Without subscribing in any way to the view that the review is a “surrogate performance” for the audience (Hanna 1983), we must recognize that there is frequently no subsequent experience at all: the review itself may be the basis of opinions formed as well as interactions involving the object.

The few sociological studies of this process have generally focused on the relationship between cultural objects and reviews (e.g., Griswold 1986, pp. 171–73) or the reviews themselves, but never on the review as a mediator of the relation between artwork and audience. Griswold (1987) employed an exhaustive collection of reviews of the novels of George Lamming in order to show how critics in different cultures fabricate alternative meanings from the same cultural objects. Lang’s early study uncovered stylistic differences between reviews in “mass” and “class” newspapers (1958). He noted that the “severity” of reviews increased from books to theater to movies to television, a finding he interprets in terms of variation in the opportunity of critics to select reviewable objects, although the relatively positive reviews of books would seem to contradict this. Levy examined reviews of the Israeli National Theatre from 1918 to 1968, reporting that the professionalization of reviewers after statehood is associated with harsher evaluations, reduced use of ideological criteria for evaluation (1979), and greater “agreement” with the public response to productions, measured as the number of performances (1988). He interprets these findings in terms of the increasing competition between theaters and the growing influence of reviewers in the post-statehood period.

*Elements of the review.*—Contemporary critical discourse reveals a

variety of components, reducible in principle to five.<sup>6</sup> *Descriptive* elements provide information about the cultural object, the performers, the setting, and so forth. Some reviewers and editors hold this to be the most important function of the review—to serve as a kind of thumbnail synopsis of what the audience may expect. This function is often given explicit recognition in special sections of newspapers that print synopses after an original review has appeared or even for shows that have not been reviewed at all. Descriptive statements may also involve the reviewer's particularistic experience of the show.

*Analytic* elements provide an interpretive context for understanding, whether through the propagation of traditional equations, metaphors, and symbolic meanings in the work or through the critic's own proposals for the construction of aesthetic significance. *Entertainment* elements (humor, wit, and displays of erudition or outrage) are interwoven throughout reviews in both types of statements, although these are sometimes separable when they take the form of direct parody or references to other works. Explicit *instruction* is relatively rare in the form of statements prescribing styles, emphases, or alternatives for cultural producers and is more often implicit in evaluation. Finally, *evaluative* elements are positive or negative judgments, often distinct from the descriptive passages of the review but frequently scattered throughout as modifiers. Although there are implicit evaluations even in the choice of descriptive elements (including adjectival descriptors), the recommendation is not generally explicit ("Go see this show"; "Give this one a miss"; "Thumbs up"). More often the review's injunction—to go or not to go—is implicit in the overall evaluation of the performance.

*Cultural mediation.*—The hypothesis of cultural mediation holds that the reception of cultural objects is not individualistic, direct, and unassisted. Instead, it consists of an influence process deriving not merely from general subcultural values and preferences but especially from experienced characterizations by authorities and associates. Specifically, it implies that reviewers are tastemakers (Lynes 1949) and gatekeepers, structuring the experience of audiences and cultural consumers.<sup>7</sup>

If reviews are cultural mediators, their content should affect the experience of an object, as when an interpretation of a book, a painting, or a show is proposed and accepted as valid. This effect (the reviewer as tastemaker) may occur either before or after the experience of an object itself.

<sup>6</sup> These components, as is revealed by even a cursory examination of national and local newspapers, can also be seen as performance objectives. I confirmed this in interviews with the principal reviewers in the present study.

<sup>7</sup> The present study omits another possible function of reviewers: they influence reperitory decisions (Griswold 1986, pp. 190–96).

Potentially more significant are the effects of reviews on decisions to experience artworks at all. That is, if a review is a kind of selection mechanism (the reviewer as gatekeeper), the evaluative component of the review should increase or decrease the probability of acquiring an experience to interpret in the first place. A cultural mediation argument predicts that the more positive the review, the larger the size of the viewing audience. In the absence of an audience, the success of an artwork, artist, or style is likely to be minimal.<sup>8</sup>

Two assumptions are implicit in the prediction of such a relationship. One is that tastemaking and gatekeeping functions are related, such that reviewers' tastes are carried through witnessed productions with the result that the consumer's evaluation of the show is relatively similar to the reviewer's.<sup>9</sup> If reviewers' tastes are at odds with popular preferences because they are oversophisticated or idiosyncratic, then there should be no effect of reviews on size of audience: following reviewers' recommendations will be unrelated to enjoyment of artwork, so consumers must employ other decision criteria.<sup>10</sup>

A second assumption behind the cultural mediation review is that, for its readers, the evaluative function of the review is more salient than its descriptive function. If, instead, audiences simply employ the review as a source of information, reviewer judgments will have no effect. If the major function of performance art is entertainment, glowing reviews of distressing subjects may serve to warn off an audience, and negative reviews of subjects with high cultural interest (e.g., *Batman*) may still promote attendance. Put differently, the importance of reviews may vary for different publics or types of art. The simple hypothesis that critical discourse mediates the relationship between object and reception neglects the role of *genre*.

## GENRE AND SENSIBILITY

A genre is a set of artworks classified together on the basis of perceived similarities (DiMaggio 1987, p. 441). Such classification is a social construction, a device that, on the one hand, offers clues as to a producer's

<sup>8</sup> A slightly different view, held in the theater world, is described by Goodlad (1971, p. 137), namely, that the influence of critics is primarily negative, at least for theater. That is, they can kill a play stone dead but cannot actually create hits.

<sup>9</sup> This need not be because the reviewer has directly shaped the preference of the consumer in a particular case—the reviewer may simply be predicting the likely response of the audience.

<sup>10</sup> Gans (1974) argues that the standards of critics who write about upper-class and upper-middle-class culture are quite different from the standards of those who read the dailies.

intended meaning and, on the other, facilitates criticism through a pragmatic comparative routine (Griswold 1988). By knowing what kinds of cultural products are generally grouped together, the critic works with known baseline contrasts. By knowing the kind of entity on display, a consumer invokes general expectations for the nature of the cultural experience to be obtained.

DiMaggio's theory of artistic classification systems employs two related uses of the genre concept. On the one hand, genre may be viewed as the socially defined, ritual classification system that is generated by the social structure. In this view, such societywide characteristics as status diversity, access to higher education, inequality, and intergroup interaction affect the differentiation, degree of hierarchy, universality, and ritual strength of the artistic classification system.

On the other hand, artistic classifications may be generated by characteristics of the systems that produce and distribute art (Hirsch 1972; Peterson 1979). DiMaggio specifies three "industry-specific principles" (commercial, professional, and administrative), each influenced by the network of individuals and organizations involved in the production, funding, and regulation of cultural objects (1987, pp. 449–52).

Ritual and institutional genres are not unrelated. Where classifications are universalistic, any attempt by commercial or artistic interests to modify or introduce new genres must contend with the cultural authority of preexisting ones. However, one form of cultural classification—the distinction between high culture and popular culture—has been with us since the 17th century (Bourdieu 1984, p. 2). As DiMaggio argues, the high/popular distinction is of special interest "because of its enduring potency and because it was forged by the direct efforts of the status groups that employed it" (1987, p. 446; 1982).

Two views on the relationship between high and popular cultures have gained currency. The "cultural convergence" view emphasizes the diminishing differences between the realms of high art and popular art. National economic integration, the growth of a middle class, the growth of large-scale organizations, and declining differences in education have fostered increasing linkages between masses and elites (Blau 1988a, p. 285). Concentration of wealth no longer promotes elite art, while both popular and elite cultural institutions flourish in cities with low inequality and high education (Blau et al. 1986). Whether classification systems are viewed as becoming more differentiated (DiMaggio 1987, p. 452; Gans 1985) or simply blurred and flexible (Levine 1988, pp. 243–56), genres have become less hierarchical.

The cultural capital view stresses the relationship between art and class reproduction, in Bourdieu's terms, relationships of "distinction" (1984). Cultural consumption is taken as a marker of class differences,



and participation in high culture, with its monopoly of "sublime purposelessness" (Raymonde Moulin, quoted in Becker [1982, p. 354]) is therefore important as a means of mobility and symbolic affiliation with high-status groups (DiMaggio 1982; DiMaggio and Mohr 1985). Bourdieu interprets consistent correlations between educational status, social origins (father's occupation), and various indices of taste as reflections of divergent underlying aesthetics produced by socialization and educational experience (1984, pp. 1-44). The implication is that class interests—the differentiation of positions in social space—promote the continuing differentiation of "legitimate" and "popular" taste.

The "popular aesthetic" (associated with the working class) refuses to distance itself from the everyday world of experience. Cultural objects elicit responses in terms of their explicit contents. A photograph of a wrinkled old woman is not experienced as beautiful because its object is not beautiful. The less educated are "devoid of specific categories of perception [and] cannot apply to works of scholarly culture any other code than that which enables them to apprehend, as having a meaning, objects of their everyday environment" (Bourdieu 1968, p. 591). Like the novice ethnologist, those of "barbarous taste" are faced with a ritual to which they do not have the key.

Such a direct and unmediated mode of relating to realities and representations is distinct from the "cultivated disposition," detached from the natural world, experiencing art in terms of form. What Bourdieu terms the "pure gaze" of artistic perception associates the elements of representation with each other and with other elements in artistic traditions rather than with the everyday world. This aesthetic depends on "distance from necessity" in economic terms: "The aesthetic disposition, a generalized capacity to neutralize ordinary urgencies and to bracket off practical ends, a durable inclination and aptitude for practice without a practical function, can only be constituted within an experience of the world freed from urgency and through the practice of activities which are an end in themselves, such as scholastic exercises or the contemplation of works of art" (Bourdieu 1984, p. 54). Such a "pure aesthetic" derives actively from the insensible familiarity with culture as an "enchanted experience" learned in the context of family and school. The illusion of immediate comprehension gives rise to the sense that the appreciation of cultural objects is a matter of "natural" taste, to the view that, in the words of one of Bourdieu's informants, "Education, Sir, is inborn" (1968, p. 609).

These two viewpoints generate different expectations for the mediative function of critical discourse. The discriminating sensibility associated with high art depends on the continual generation of legitimacy associated with critical evaluations. This aesthetic is distanced from the natu-

ralism and direct perception of the popular disposition. One measure of the distance is the authoritative expertise provided by others who share it. Common features are defined and contrasted with other artworks, helping to circumscribe the boundaries of correct taste both by including and excluding works on the basis of aesthetic criteria (Duncan 1953) and by suggesting performance characteristics that are valued (Becker 1982, pp. 111–15). A “highbrow” effect is expected by cultural capital reasoning: for legitimate performance genres (theater, opera), reviewer evaluations should be associated with attendance. To put it simply, the audience for serious work, is more likely to read reviews and to follow their recommendations.<sup>11</sup>

For popular genres, the review may provide information about the performance, but the popular aesthetic reserves a diminished position for reviews and remains largely unaffected by them. As Gans argues, lower taste publics become their own reviewers because they are less interested in learning how to respond “correctly” and more interested in entertainment (1974).

The cultural convergence hypothesis predicts no difference in the mediative process for different genres. As Blau argues, the distinctive realms of high art and popular art have lost their separate identities (1988a, pp. 285–86; Blau 1986; Gans 1985). Whether or not reviews mediate the reception process through their effect on attendance, we should not expect genre differences here.

Lang’s work suggests one further possibility (1958) on the basis of a “network” rather than an aesthetic concept of social distance. Ties to the network of producers and reviewers (more likely, in his view, for critics in the theater and book worlds than for television and movie reviewers) are associated with positive performance biases, while an absence of ties is associated with audience identification and, hence, public trust. By this reasoning, reviews of popular genres should have more effect on attendance than reviews of highbrow performances.

In the following section I describe a research site for testing the cultural mediation hypothesis.

#### THE EDINBURGH FESTIVAL FRINGE

The Edinburgh Festival held every August is the largest single distribution system for performing arts in the world (on distribution systems, see Becker [1982], pp. 93–130; Hirsch 1972). Begun in 1947 as the Edinburgh

<sup>11</sup> This audience should not be confused with the “serious audience” (Becker 1982, pp. 47–50). “Core” members of the audience for any genre know more about its history and works, are able to predict future value, etc. This is just as true for comic book collectors as for opera buffs, but comic books are still a “lowbrow” genre.

International Festival, it includes such performing arts as theater, dance, and opera. There are now distinct organizational entities responsible for television, film, books, and jazz as well as the Festival Fringe.

The International Festival shares with other possible research sites a number of problems that make it less than ideal for investigating cultural mediation effects. Participants are vetted by the administrator (selected partly on reputation for excellence within a narrow range of performance categories) and guaranteed audiences through advance sales to travel agents. These features limit variability in genre, reputation, and size of audience.

The Festival Fringe takes its evocative name from the "fringe" (marginal, uninvited) groups that began to perform during, but without the support of, the official festival. By 1971 the number of groups and performers had grown to such an extent that a central administrative office was formed to provide support services for the groups themselves and information for the arts audience (program, ticket sales, information about venues, etc.).

This institutional arrangement provides several advantages for an examination of the relationship between reviews and audiences.

1. *Self-selection*.—There is no artistic selection or censorship: any individual or group can perform, provided they can afford the listing, the travel, and the living expenses and can contract for a venue.

2. *Size*.—The sheer size of the Fringe enables quantitative assessment of the effects of reviews. The 1988 Fringe that provided the population of shows for this analysis was somewhat smaller than in recent years. The program advertised 913 different shows, including 50 exhibitions, by 473 companies from 22 nations.<sup>12</sup> Over 90 were from overseas, with the rest divided evenly among London, Scotland, and the rest of the United Kingdom.

3. *Concentration*.—The shows are concentrated within a three-week period (August 12–September 3),<sup>13</sup> with the number of performances specified in advance.<sup>14</sup>

<sup>12</sup> The 1987 and 1989 Fringes advertised over 1,000 shows. The published figures for groups, however, are not an accurate count for the following reason: they include only groups with main listings in the Fringe program. The use of an umbrella group with several small groups to save on the cost of listings has been a common practice in recent years. The analysis below is based on the performance rather than the group.

<sup>13</sup> Time of year is generally thought to make a difference in the success of shows (Goodlad 1971, p. 150).

<sup>14</sup> This is a major advantage for examining the effects of reviews. On Broadway, a producer may withdraw a show because of the perception that negative reviews will lead to financial loss. This assumption may or may not be correct, but it artificially limits the size of the audience.

4. *Diversity*.—Self-selection of groups insures significant variability in terms of groups and performances. Participants range from groups with international reputations (e.g., Circus Oz, often regarded as the premier circus in the world) to companies of teenagers staging their first play to “mavericks” (Becker 1982, pp. 233–46) who are outside the boundaries of the traditional performance art world. Professional (40%) and amateur (44%) groups are represented in roughly equal numbers, with the remainder mixed (16%).<sup>15</sup>

Productions ranged from the standard repertoire of theater and classical music to improvisational theater sports, a two-person opera based on the life of Hieronymus Bosch, eight five-minute plays in one show, a cabaret about the rise of Marilyn Monroe from the grave, the Zen meditations of a nude artist's model, and live performances in one's own home. (In-house performances, so to speak, are not included in the present study.) This heterogeneity is reduced by categorization to 17 types in the program's “Index of Show Titles,” including theater, comedy, opera, cabaret, orchestral performances, poetry readings, jazz, folk music, and children's shows (see table 1 for complete listing).<sup>16</sup> Shows are assigned to categories by the groups themselves.

5. *Review coverage*.—Size and diversity are structural constraints that affect the behavior of performers, public, and mass media. For the performers, competition for audiences is intense. From 103 to 492 ( $\mu = 378$ ,  $\sigma = 123$ ) performances were available each day; at peak times the daily guide listed over a dozen simultaneous start times for shows on the Fringe. These shows must compete with the other festivals as well.

For the audience, some of whom come specifically to attend a large number of performances, two basic strategies are available: a *restrictive* strategy based on knowledge of past festivals (narrowing one's interest to a well-known venue, established performers, or groups that have been satisfactory in the past) and an *information-gathering* strategy based on current information (asking friends, reading reviews).

The print media attempt to fill this demand for information by an increase in the space devoted to the arts during the festival period. Two weekly tabloids exclusively devoted to festival coverage are published. Several national papers (e.g., *The Independent*, *The Guardian*) establish

<sup>15</sup> These percentages are based on the results of a survey of groups ( $N = 129$ ) carried out after the Fringe. Owing to the problem of defining a “group” (see n. 11 above) and the survey's low response rate (27%), these data are not used in the analysis below.

<sup>16</sup> Diversity is not itself novel. In the 17th century and throughout the 19th, London theater programs included singing, dancing, and acrobatics. Even the traditional Fringe practice of rushing from show to show has a historical precedent in the Battle of the Romeos (Griswold 1986, pp. 107, 258).

TABLE 1

FREQUENCY OF PRODUCTIONS BY GENRE: 1988 EDINBURGH FESTIVAL FRINGE\*

| Genre                               | <i>N</i> | %     |
|-------------------------------------|----------|-------|
| Highbrow:                           |          |       |
| Theater .....                       | 331      | 87.6  |
| Opera .....                         | 3        | .8    |
| Mime .....                          | 5        | 1.3   |
| Dance .....                         | 15       | 4.0   |
| Orchestral† .....                   | 6        | 1.6   |
| Recitals‡ .....                     | 9        | 2.4   |
| Poetry§ .....                       | 2        | .5    |
| Performance art <sup>  </sup> ..... | 7        | 1.9   |
| Total .....                         | 378      | 100.1 |
| Popular:                            |          |       |
| Comedy .....                        | 68       | 26.6  |
| Musical .....                       | 27       | 10.5  |
| Revue .....                         | 20       | 7.8   |
| Cabaret .....                       | 59       | 23.0  |
| Folk <sup>#</sup> .....             | 27       | 10.5  |
| Jazz .....                          | 7        | 2.7   |
| Rock** .....                        | 9        | 3.5   |
| Children .....                      | 39       | 15.2  |
| Total .....                         | 256      | 99.8  |

\* Exhibitions and free shows excluded as well as single performances.

† Includes chamber music.

‡ Includes vocal music.

§ Includes readings.

<sup>||</sup> Includes miscellaneous and multimedia.<sup>#</sup> Includes Scottish and ceilidh music.

\*\* Includes blues.

temporary offices in Edinburgh. No single source reviews all productions, although four periodicals attempt to be relatively comprehensive in their treatments. In spite of frequent complaints to the contrary, all shows have an opportunity to be reviewed, and the majority are reviewed at least once.<sup>17</sup>

Inevitably, the number of critics prowling Edinburgh is enormous. Some of these reviewers are well-known arts journalists, but many, who only write reviews during the festival, have been recruited from the news desk. Others are students on summer break, or professors, or are drawn from the arts-conscious public.

<sup>17</sup> Ninety-two percent of groups in the survey said that their shows had been reviewed. Only 18% of shows failed to receive a review in any of the four major Edinburgh publications. Shows received an average of two reviews each (see table 2).

## METHODS

To test the cultural mediation hypothesis, I obtained attendance data for shows at the 1988 Fringe, evaluated the reviews received by each, and estimated separate models of attendance for highbrow and popular genres with other determinants of attendance controlled.<sup>18</sup>

The population was initially defined as all productions in the 1988 Fringe program. A "production" is considered any run of two or more performances for which a single ticket is required.<sup>19</sup> I excluded exhibitions, classes, workshops, free shows, and productions that contained completely different contents (artists or program) each time. The latter, like shows that are only performed once, are reviewable only after the fact.

*Dependent variables.*—Records maintained by the Fringe administrative office were used to develop two measures of attendance. Tickets are sold by a central box office (about one-third of all sales) and at the venues themselves. Since less than half of the performing groups report venue sales figures to the Fringe office, complete (i.e., both box office and venue) attendance information is available for only 61% of all shows in the population. This measure, while comprehensive, is biased in favor of the more stable and established groups that maintain and report sales records (e.g., those with administrators and those that do not disband after the festival). Statistically significant differences exist between these groups and the remainder of the sample in terms of the number of tickets sold, audiovisual and print media coverage, venue capacity, national visibility, past awards won, past popularity as a Fringe attraction, and even the character of the reviews received.

A second, preferred indicator is the number of tickets sold at the Fringe box office. This number, which reflects advance ticket sales (up to a few hours before the performance), rather than total attendance, has as its main advantage its availability for all productions. For purposes of comparison, models are presented for each dependent variable (in logarithmic form).<sup>20</sup>

*Genre.*—The Fringe program employs an administrative classification system (DiMaggio 1987, p. 451). This relatively detailed set of categories was designed to reduce uncertainty on the part of audiences and therefore

<sup>18</sup> It should be emphasized that the parameter estimates in the models below refer to the entire population of shows rather than to a sample.

<sup>19</sup> If two or more separate pieces are included for the price of a ticket, they are considered one production by this definition. In such cases the shows are almost always reviewed together.

<sup>20</sup> Total sales and Fringe box-office sales are highly correlated:  $r = .84$  untransformed and  $r = .89$  when reexpressed as logarithms.

employs widely accepted cultural categories (ritual classifications). I dichotomized these program categories into highbrow and popular types as indicators of the two varieties of cultural objects required by the cultural capital argument (table 1). Since there is no authoritative source for such a classification system, it is subject to dispute and revision.<sup>21</sup> Most important is that it was developed before the estimation of the models.<sup>22</sup> As indicated in table 1, theater represents nearly 88% of highbrow performances. Shows are more evenly distributed in the popular category among comedy (27%), cabaret (23%), children's shows (15%), musicals (10%), folk music (10%), and revues (8%).

*Review variables.*—Review coverage varies in terms of visibility and modality.<sup>23</sup> "Visibility" indicates *whether* a cultural object receives the attention of critics, while "modality" indicates the *kind* of attention (positive or negative) it receives. Visibility may affect the reception of cultural objects, but only modality is relevant to cultural mediation arguments.

1. *Visibility.*—The four primary sources for Fringe reviews include the *Scotsman* (Edinburgh's morning daily), the *LIST* (an arts and entertainment magazine published weekly during the festival), and two special-purpose tabloids (*Review88* and *Festival Times*). A measure of local visibility of shows indicates the number of reviews received by these four sources.<sup>24</sup> Eighty-two percent of shows received at least one review.

<sup>21</sup> After the research for the present study was done, Zolberg published a list of genres in fine and popular art (1990, p. 144). Although her list is more comprehensive and even includes such products as cemetery gravestones and limited circulation periodicals, it has no categorical conflicts with table 1.

<sup>22</sup> This point is worth emphasizing because of the temptation to "refine" dichotomies to fit hypotheses. In this instance, further analysis revealed children's shows, the most problematic category, to deviate from the popular pattern (i.e., reviews are related to attendance) for children's shows. Hence, the test presented below is conservative. Children's shows may be subject to review effects because, where selection is concerned, they are not children's shows at all.

<sup>23</sup> The definition of review employed here is somewhat narrower than Griswold's, which includes "critical discussions" as well (1987, p. 1088). I did not code Fringe coverage that consisted of such discussions or coverage in which many shows received a passing mention or features in which artists were interviewed.

<sup>24</sup> The national newspapers are not included here because they are more selective. Using the review file maintained by the administrative office and a commercial clippings service, I calculated a measure based on the number of reviews in national, local, and Sunday papers (*The Guardian*, *The Independent*, *The Times*, *The Observer*, *Scotland on Sunday*, *The Glasgow Herald*, *Evening News*, *Financial Times*, *The Times Educational Supplement*, *Sunday Times*). This measure is correlated  $r = .38$  with local visibility but does not contribute significantly to explained variation in the final models that include that variable. This may be because, although members of the London audience are far more likely to read these national dailies, if they come to Edinburgh, they are subject to the local reviews as well.

The number of mentions in the broadcast media serves as a second measure of visibility. Because airtime is limited and producers are selective, I consider all coverage to be positive.<sup>25</sup> Only 20% of shows received notice on television or radio.

2. *Modality*.—A measure of the modality of critical discourse—the extent to which reviews constitute a recommendation of the show—must take into account differential evaluations by reviewers and their publication in relation to the run of the show. All reviews of shows in the population were evaluated by two coders using a five-point scale such that negative reviews have negative values and positive reviews, positive values.<sup>26</sup> For each of the four periodicals, review scores were somewhat positive, averaging from .3 to .4 on a scale ranging from -2 to +2.

Values for the two scores were averaged and multiplied by a “risk” factor. Reviews published after a show closes are of no use to companies or potential audiences. Conversely, reviews published the day after opening could have a very positive (or negative) effect. Hence, a weight factor is necessary to indicate the proportion of total days on which shows could be affected by the review (number of days left in the show after the review/total number of days), that is, the proportion of performances at risk of a positive or negative review. The four weighted review variables were then summed to indicate the overall critical evaluations of each production.<sup>27</sup>

*Controls*.—In predicting attendance for the performing arts, several additional factors are likely to affect the size of audience (see table 2).

1. The size of the actual audience depends in part on the size of the potential audience (the number of tickets available). A control is needed for

<sup>25</sup> I have included the primary sources of Festival Fringe coverage in this measure: BBC Radio Scotland (“Festival View,” “Tuesday Review”), BBC TV Scotland (“Forth Fiesta”), and BBC Radio (“Round Midnight,” “Kaleidoscope,” “Aspects of the Fringe,” “Cutoff at the Fringe”).

<sup>26</sup> The five-point scale used is similar to that of Lang (1958). A simple dichotomous (favorable/unfavorable) coding did not do justice to the range of evaluations embedded in the reviews, while a more complex system was too difficult to administer. A Likert-type rating was used, but precise definitions were given to aid in coding ambiguous cases (see the Appendix). A score of zero was used if no review was published. Pearson and intraclass correlations between coder ratings are as follows: *Scotsman*,  $r = .93/\rho = .91$ ; *Festival Times*,  $r = .92/\rho = .89$ ; *LIST*,  $r = .91/\rho = .88$ ; *Review88*,  $r = .93/\rho = .89$ .

<sup>27</sup> Notably, the unweighted, zero-order correlations *between* reviews of the four periodicals are not high, ranging from .13 to .33. Summing would therefore be dubious if they were seen as common measures of an underlying construct (e.g., the “quality” of the performance). This is not the case here. Empirically, I find little consensus among reviewers about the merits of particular shows. Their independent judgments are combined to indicate the overall assessment that was publicly available.



TABLE 2

## CHARACTERISTICS OF PRODUCTIONS AT THE 1988 EDINBURGH FESTIVAL FRINGE\*

| Variable                         | N   | Mean    | SD      | Range      |
|----------------------------------|-----|---------|---------|------------|
| Capacity .....                   | 633 | 1,692.7 | 1,653.9 | 120-11,780 |
| Reputation of group .....        | 634 | .76     | 1.82    | 0-9        |
| Review frequency .....           | 634 | 1.9     | 1.3     | 0-4        |
| New show .....                   | 634 | .36     | .48     | 0,1        |
| Duration of show (minutes) ..... | 634 | 84.4    | 26.7    | 13-195     |
| Show time .....                  | 634 | 16.9    | 3.9     | 10-25      |
| N of TV/radio reviews .....      | 634 | .26     | .59     | 0-4        |
| Youth group .....                | 634 | .17     | .38     | 0,1        |
| Review modality (weighted) ..... | 634 | .69     | 1.47    | -3.6-6.6   |
| Fringe box-office sales† .....   | 625 | 4.25    | 1.39    | -.69-8.17  |
| Total sales† .....               | 380 | 6.01    | 1.17    | 2.77-9.36  |

\* See text for coding.

† Natural logarithm.

total possible sales, that is, audience capacity (the number of performances multiplied by the number of seats in the venue).<sup>28</sup>

2. Potential audiences may be affected by the hour of the day at which the performance begins and duration of the show (measured in minutes).
3. New productions may experience a liability in getting audiences. Although there is no perfectly reliable measure of newness, eligibility for a Fringe First Award indicated that the show had not been performed more than six times within the United Kingdom. These shows were quite unlikely to have been seen by the Edinburgh audience. Shows were coded one if they were designated eligible, zero otherwise. By this criterion, 36% of the shows were original.
4. Since youth groups might be at a disadvantage, shows were coded one if the title or description of the show indicated a school or university group (17% of all productions).
5. Audiences often have some antecedent knowledge of performers and prefer groups with some prior reputation for quality work. Indeed, since it is possible that reviewers are themselves biased in favor of these same groups, a measure of prior reputation was developed. A list of all groups at the 1988 Fringe was evaluated by nine judges, each of whom nomi-

<sup>28</sup> The number of performances was taken from the Fringe program, then corrected for additional and canceled performances, as indicated by the daily updated records, and checked against the change forms submitted for the daily program guide. The capacity of the venue was given by the district council or directly by the venue. In 13 cases of multiple venues, appropriate adjustments were made. Initially it was thought necessary to control for sold-out shows. Widespread rumors to the contrary, very few shows sell out. Less than 15% of shows reported even one sold-out day at the Fringe box office, and only 5% reported more than three sellouts. These tickets account for fewer than half of total ticket sales, and the average run of a show is nearly 2 weeks.

TABLE 3  
OLS REGRESSIONS PREDICTING NATURAL LOG OF ATTENDANCE

| PREDICTORS*                 | FRINGE BOX OFFICE |     |          | TOTAL ATTENDANCE |     |          |
|-----------------------------|-------------------|-----|----------|------------------|-----|----------|
|                             | <i>b</i>          | SE  | <i>P</i> | <i>b</i>         | SE  | <i>P</i> |
| Capacity .....              | .23               | .03 | <.001    | .23              | .03 | <.001    |
| Reputation .....            | .16               | .02 | <.001    | .11              | .02 | <.001    |
| Review frequency .....      | .30               | .04 | <.001    | .25              | .03 | <.001    |
| New show .....              | -.78              | .09 | <.001    | -.47             | .08 | <.001    |
| Duration† .....             | 7.62              | 1.5 | <.001    | 4.6              | 1.5 | .002     |
| Show time .....             | .02               | .01 | .03      | .03              | .01 | .008     |
| Media coverage .....        | .22               | .08 | .01      | .24              | .06 | <.001    |
| Youth status .....          | -.18              | .11 | .11      | -.13             | .11 | .23      |
| Venue‡ .....                | -.33              | .12 | .01      |                  |     |          |
| Modality .....              | .07               | .03 | .01      | .08              | .03 | .004     |
| Intercept .....             | 2.36              | .23 | <.01     | 4.16             | .22 | <.001    |
| <i>R</i> <sup>2</sup> ..... |                   | .50 |          |                  | .63 |          |
| <i>N</i> .....              |                   | 624 |          |                  | 379 |          |

NOTE.—Unstandardized regression coefficients are followed by standard errors and probability values for *t*-tests.

\* See table 2 for variable descriptions.

† Coefficients are multiplied by 1,000.

‡ Included for Fringe box-office sales only (see text).

nated those groups that had previously achieved national reputations in England or Scotland. These nominations were summed to create a measure of national visibility ranging from zero to nine.<sup>29</sup> Twenty-three percent of shows were performed by groups with some previous national reputation.

6. A final measure is a dichotomy indicating whether the show is performed at one of four major Fringe venues.<sup>30</sup>

## RESULTS

Table 3 shows the results of regressing the logarithm of ticket sales on review visibility, review modality, and control variables. The same variables are statistically significant in each equation. The magnitudes of the

<sup>29</sup> Nominators included the administrator and assistant administrator of the Festival Fringe Society, the arts editor of the *Scotsman*, the artistic director of the Royal Lyceum Theatre, three critics familiar with the national performing arts world, a playwright, and an actress.

<sup>30</sup> This measure is of no theoretical interest but must be included in models predicting central box-office sales because some large venues are more likely to remove tickets from the box office (which charges 7% commission) for weekend shows. Out of the 144 Fringe venues, I have included shows that appeared at the Assembly Rooms, the Traverse Theatre, the Gilded Balloon, and the Pleasance (15% of the total).

unstandardized OLS coefficients are similar as well.<sup>31</sup> The model that includes all 10 variables explains half of the variance in Fringe box-office sales. Excluding the effect of venue, which is irrelevant to total sales, the nine-variable model explains 63% of the variance in attendance.

In each case, the only factor not contributing significantly to the prediction of attendance is the youth of the company. Capacity, national reputation, the number of reviews both in print and in the broadcast media, length of show, and start time are positively related to audience size, while originality of show is negatively related to size. The cultural mediation argument is supported by a positive coefficient for review modality, indicating that the more positive the critical evaluation of the show (and the earlier it appears), the larger the audience in attendance.

Highbrow and popular genres are examined separately in table 4. Standardized coefficients are presented in order to compare the magnitude of effects within each model. Again, from half to two-thirds of the variance in attendance may be explained by this set of independent variables.<sup>32</sup>

As in table 3, capacity, reputation, duration, and number of reviews exhibit positive net effects in all four equations. Originality of production has a significant negative effect in each model except total attendance for popular shows. Again, as expected, venue has a negative effect in the models for Fringe box-office ticket sales.

The remaining effects vary in significance levels by genre. The effects of media coverage and youth status are not consistent in the models for Fringe box office and total attendance. Broadcast coverage as well as youth status are more important for popular genres when Fringe box-office sales is the dependent variable. Start time is, on either criterion, important for highbrow shows but not for popular shows.

For testing genre mediation arguments the important comparison is between the coefficients for review modality for each genre type. The last row of coefficients shows that modality is positive and significant ( $P = .01$ ) for highbrow shows only.<sup>33</sup> This comparison is consistent for

<sup>31</sup> This is unsurprising since the model predicting total ticket sales is really a subset of cases from the model predicting Fringe box-office ticket sales. However, as I have argued, it is not a random subset, and the latter is preferable as an indicator of attendance.

<sup>32</sup> I performed tests for multicollinearity (see n. 34 below), sensitivity to outliers (n. 33 below) and heteroscedasticity for each of the models in table 4. First I standardized variables (the test is sensitive to scale), then I estimated a heteroscedasticity-consistent covariance matrix and compared that with the covariance matrix (White 1980). Probability values for chi-square tests indicate that the differences are likely to be due to chance, i.e., the homoscedasticity assumption is met.

<sup>33</sup> Because of the reduction in the number of cases and because, in the absence of prior research in the area, additional (unmeasured) factors may influence attendance, an examination of residuals was undertaken for the four models in table 4. First,

TABLE 4  
OLS REGRESSIONS PREDICTING NATURAL LOG OF ATTENDANCE FOR HIGHBROW AND POPULAR GENRES

| PREDICTORS*            | FRINGE BOX OFFICE |       |         |       | TOTAL ATTENDANCE |       |         |       |
|------------------------|-------------------|-------|---------|-------|------------------|-------|---------|-------|
|                        | Highbrow          |       | Popular |       | Highbrow         |       | Popular |       |
|                        | $\beta$           | P     | $\beta$ | P     | $\beta$          | P     | $\beta$ | P     |
| Capacity .....         | .27               | <.001 | .28     | <.001 | .31              | <.001 | .37     | <.001 |
| Reputation .....       | .20               | <.001 | .26     | <.001 | .24              | <.001 | .17     | .001  |
| Review frequency ..... | .37               | <.001 | .29     | <.001 | .35              | <.001 | .29     | <.001 |
| New show .....         | -.28              | <.001 | -.15    | .002  | -.22             | <.001 | -.09    | .09   |
| Duration .....         | .19               | <.001 | .10     | <.001 | .11              | .01   | .12     | .01   |
| Show time .....        | .10               | .01   | -.06    | .24   | .10              | .02   | .02     | .69   |
| Media coverage .....   | .06               | .15   | .12     | .04   | .11              | .02   | .14     | .02   |
| Youth status .....     | .01               | .84   | -.10    | .04   | -.02             | .67   | -.06    | .24   |
| Venue .....            | -.09              | .04   | -.12    | .02   |                  |       |         |       |
| Modality .....         | .11               | .01   | .05     | .38   | .12              | .01   | .08     | .17   |
| $R^2$ .....            | .52               |       |         |       |                  |       |         |       |
| N .....                | 372               |       | 252     |       | .64              |       | .66     |       |
|                        |                   |       |         |       | 215              |       | 164     |       |

NOTE.—Standardized regression coefficients are followed by probability values for *t*-tests.

\* See table 2 for variable descriptions.

Fringe box-office and total sales, though the difference is not as great for total sales. That is, for highbrow genres such as the theater, positive reviews are associated with larger audience sizes, but not for popular performances (e.g., comedy, cabaret).<sup>34</sup>

Comparing the size of the effects, the best predictor of audience size is the sheer number of reviews published in the major Edinburgh papers.<sup>35</sup> The prior reputations of the performing group and the show itself (known performers and works) are also important, followed by show length (the longer the better). Somewhat less important, but still significant, are media coverage and youth status (for popular genres) and, for highbrow genres, start time and review modality.

## DISCUSSION

The results presented in table 4 indicate, for the first time, the mediating effects of reviews in the reception of cultural objects. Several are worth emphasis, beginning with the general evidence that cultural mediation through critical reviews is associated, net of other factors, with the size of the audience for the performing arts. More positive reviews, particularly when they appear early in the run of the show, are conducive to larger audiences. The findings indicate that they are not the most important factor, however. Reviewers do not have the power to make or break a show.

The effect of reviews is more through visibility provided than through evaluations tendered. Even the simple count of reviews received is a

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studentized residuals were computed. Next, all observations with values above  $|2|$  were scrutinized and removed from the data matrix before refitting the models. Virtually identical results were obtained. Only one of these values exceeded the hat diagonal cutoff value—adjusted for sample size and the number of parameters fitted ( $2 * p/n$ )—for each model (Belsley et al. 1980). Because of the importance of review modality, I computed a measure of the change in the parameter estimate for this variable produced by deleting each case (Dfbeta). Again, for observations with large residuals ( $>|2|$ ), I deleted those with values exceeding the size-adjusted cutoff of  $2/\sqrt{n}$  (since none exceeded the general cutoff value of two) and refitted the models with virtually no change in the parameter estimate for modality.

<sup>34</sup> To test the possibility that the lack of significance might be due to inflated variance in the parameter estimate for popular genres, I performed a collinearity analysis. Variance-inflation factors (VIFs) for modalities of 1.46 and 1.49 (for Fringe box-office sales and total sales, respectively) are well below the accepted range of 5–10 and less than the VIF for the model as a whole. Eigenanalysis of the correlation matrix (i.e., excluding the intercept) shows no large condition indices (less than three in all models) or small eigenvalues (Freund and Littell 1986), indicating that multicollinearity is not a problem.

<sup>35</sup> Here I neglect the structural factors of capacity and venue and focus exclusively on Fringe box-office sales.

fairly good predictor of audience size ( $r = .49$  for total attendance). More important than *what* the reviews say about a production is simply that it has been noticed and reviewed by critics in a variety of widely available forums. This viewpoint is sometimes expressed by the performers themselves for a somewhat different reason: even mediocre or negative reviews are better than no reviews at all because they can be carved up (strategically edited) to present a show in a favorable light. The results here suggest that potential audiences respond less to the evaluative component of reviews than to their descriptive component, supporting Hirsch's (1972) contention that coverage decisions by mass-media gatekeepers are significant in the reception of cultural products. At the same time they illustrate an important difference between mediation processes in the cultural and business domains, where corporate reputation is *negatively* associated with the sheer number of media accounts (Fombrun and Shanley 1990).

Reading or seeing reviews in a number of places highlights the importance of a show and maintains its salience for taste publics in ways that may be more effective, but serve much the same function, as advertising. This visibility effect is somewhat less powerful, but still significant, outside the print media through radio and television coverage.

Reputational processes, set in motion long before groups enter the competition for festival audiences, are a second crucial asset. Of course, it is consistent with these results that past reviews, by drawing the attention of audiences and producers, may have helped to generate the visibility and career trajectory that carries over to the present festival. Still, all else being equal, for the purposes of capturing a public, good notices are not worth as much as prior reputation.

Artworks themselves, not just groups, have reputations (Becker 1982, pp. 358–59). Although I was unable to evaluate these reputations directly, the negative coefficient for new plays suggests a liability of newness for the performance of unknown works. Even at the Edinburgh Fringe, with its reputation for innovation, risk taking, and an “adventuresome” audience, these results show that consumers are generally disinclined to view new work, at least in a festival situation where there is an abundance of choice. For these shows, the reviews and the reputation of the group become quite important.

Another misconception that pervades the festival is the idea that, because of the practice of show hopping, shorter productions are preferable. The positive association between duration and attendance may indicate a preference for more substantial shows.

Consistent with cultural capital arguments, the results indicate differences between highbrow and popular genres in predictors of attendance.

Two of these differences are shared for both indicators of participation. Unexpectedly, for highbrow, but not for popular genres, later start times are associated with larger audiences. Griswold, in her account of the 19th-century London theater, attributes part of the loss of the affluent audience to a postponement of the dinner hour (1986, p. 132) that conflicted with performance times for many theaters. At the Edinburgh Festival, audiences for highbrow genres are less willing to attend early performances as well, probably because of this "consumption" effect.

More important, the results are consistent with cultural capital as against cultural convergence positions on the operation of critical discourse as a mediator of cultural experience. I suggested that the underlying aesthetics identified by Bourdieu could be interpreted in terms of the distinction between highbrow and popular genres: the differentiation of legitimate and popular taste might be framed as a difference in the selection of type classes of performing arts. Since the discriminating sensibility associated with high art does not depend on direct perception but rather on the refined evaluation of aesthetically relevant production features, the critic plays an important role in the definition and maintenance of performance standards. Expert judgments are relevant to consumer participation and perceptions in legitimate genres but unnecessary in popular genres.

In the latter, aside from imparting information about the performance, reviewer appraisals are not important. Although reviews may be read and used, the judgmental function is relatively inoperative. We should expect the relationship between review modality and attendance to differ by type of genre because of this difference in principles of selection.

The positive association between reviewer evaluations and audience size for highbrow but not for popular genres is consistent with cultural capital arguments. In Bourdieu's view, these discriminative processes are class related, such that higher positions in the stratification system are associated with the pure aesthetic, lower positions with the popular aesthetic. Individuals, as carriers of aesthetics, respond to participation opportunities in specific and consistent ways.

However, because of the aggregate nature of the data, the results above are consistent with an alternative interpretation. As U.S. studies have shown, economic inequality and high social status are associated not only with consumption of high art, but with consumption of *more diverse* art (Feld et al. 1983; Blau et al. 1985; DiMaggio 1987). Theatergoers attend cabaret as well. But do they participate in the same way for each genre? A less individualistic and more situational conception of popular and pure aesthetics views them as dispositions that come into effect for different kinds of artwork.

For popular genres, direct and unmediated participation may be more likely, regardless of class background. Viewed as mere entertainment without cultural and symbolic pretensions, comedy and musicals need no authoritative aesthetic vision to legitimate their worth. Gans's characterization of lower taste publics as lacking an interest in the "correct" responses to art may be accurate, even if the "public" is drawn from diverse occupational and educational strata. For genres such as revues and cabarets, as well as for soap operas, the world of everyday experience is sufficient ground for understanding and appreciation.<sup>36</sup>

Yet for these same consumers, high art may be approached differently, as an "enchanted experience," for which training in school and university is supplemented by the estimation of cultural legitimators. The cultivated disposition is brought into play in considering art forms regarded as serious. Form replaces content; relational and comparative features grow in importance over direct perception; elements of the artistic traditions are referenced that require critical interpretation. There is no point wasting time on theatrical productions known to be of inferior aesthetic value—better go to a movie that has stars you know.<sup>37</sup>

This interpretation is lent credence by an unexpected relationship between the published reviews and the informal judgments of the reviewers.<sup>38</sup> A direct comparison of the difference between these verbal evaluations and the evaluations embedded in the review reveals that published reviews are more favorable, but that this effect is much stronger for popular genres than highbrow genres. That is, reviewers tend to be softer in print than in private, but how favorable they will be depends on the nature of the show. Stated differently, my informants appraised highbrow and popular shows about equally, but they *wrote* much more favorably about popular shows.<sup>39</sup> Apparently, critics take their "critical role" more seriously when they approach cultural products like theater than when they write about comedy, revue, and cabaret.

<sup>36</sup> This argument does not apply, of course, to social worlds in which stylistic criteria are paramount generally (cf. Smith's [1974] analysis of the dandy life).

<sup>37</sup> Even the notion of an insouciant perusal of lowbrow reviews may not fully account for the process. Unmediated participation could lead to lower consensus on the merits of artistic performances, which could in turn lead to a lack of fit and, eventually, to a lack of trust in reviewer judgments. More investigation will be required to determine whether there is actually less consensus on quality of performances in lowbrow genres.

<sup>38</sup> I interviewed the most prominent *Scotsman* reviewers to obtain informal ratings for 319 shows using the same five-point scale with which their published reviews were later assessed, then computed a difference score.

<sup>39</sup> This difference was not due to the particular reviewers who were assigned to cover popular or highbrow shows or to any other control variable.



## CONCLUSION

Consideration of festivals as distribution systems makes concrete Becker's claim that there is one art world: festivals serve as a forum for internetwork interactions. The theater has changed vastly as an organizational system of audiences, performers, and objects (Griswold 1986, p. 189). The festival is an important component of the dramatic world, especially as it allows for the concentration of an audience actively seeking exposure to a variety of cultural products.

Owing to temporal concentration and the high level of competition between shows, the festival setting differs from such nonfestival settings for the performance arts as Broadway or local programs arranged by entrepreneurs, repertory theaters, and arts councils. Festivals themselves are increasingly important parts of the performing arts world: the temporary concentration of resources in a local setting enables the recruitment of national and international caliber performers and is thought to promote increased interest in the genres represented (e.g., the recent proliferation of jazz festivals). *Festival!*, a guide to international theater and dance festivals, lists 37 festivals during a recent two-month period in Europe and North America alone.

To what extent are the results presented here bound by the particular time and place of data collection? Although festival performances are not in any sense unusual—indeed, there are no grounds for thinking that they account for more or less in number than nonfestival performances—the effects of reviews might be different. On the one hand, it might be that reviews are more important at the Fringe because one can expect a Broadway or London play, even a very bad one, to be a professional production; while on the Fringe, legendary levels of incompetence have led to the establishment of a special worst performance award (the *Snakebite*). On the other hand, since the print media must utilize a large number of unknown, nonprofessional reviewers, the public might be expected to take them less seriously.<sup>40</sup>

The concept of cultural mediation has previously been understood primarily in organizational and environmental terms, as a function of the production and distributional properties of cultural industry systems. This study has broadened the focus to the processes of selection and interpretation by reviewers and individual consumers of culture, given the mutual determination of art styles and audience response. Organizational gatekeepers constrain artistic diversity by making available to the

<sup>40</sup> Another difference between festivals and city theater worlds is that informal relations between reviewers and the majority of groups are few and fleeting.

public only a small number of the works that are actually created (Peterson 1985; Coser et al. 1982). But within the pool of available work, reputational processes operate: the production capacity for the performance arts far exceeds what most individual audience members can view, creating problems of selection (Becker 1982, pp. 362–64, 367–68). Furthermore, attendance at artworks is not necessarily an indicator of positive audience evaluations of the works. Indeed, some audience research shows that the number watching televised dramas is not correlated with rated popularity (Goodlad 1971).

Reviewers are ideological labelers, opinionators, tastemakers, and symbolic framers of events. The traditional critic has been called a reporter of private experience (Lang 1958), but his or her judgments are explicitly produced as a public genre. The effects of these judgments, and the conditions under which they occur, beg incorporation into sociological theories of participation in art. Besides their potential to provide an audience under certain conditions, there are other important functions: as a basis for future advertising,<sup>41</sup> as moral and aesthetic encouragement for art-world participants, and as stimuli to modify current or future productions, as a point of reference for conversational interaction not only about art but about current social issues.

Of course, reviewers are not the only mediators between artist and audience. The performers, director, producer, stagehands, and so forth, are all part of the cooperative network that brings the aesthetic event into being, but it remains unclear whether they should be seen as mediators or simply as cooperative artists (as argued by Becker [1982]). Aesthetic specialists provide general orientations to styles and genres. Friends and acquaintances supply interpretations specifically relevant to the personal life world. Participation, as well as perception, is influenced by the audience itself, considered as a network of interactants (word of mouth, in the parlance of the arts business). Interpersonal recommendations have not been measured in the present study.<sup>42</sup> Undoubtedly, they explain part of the unexplained variation in the models considered here. However, given that up to two-thirds of the variance has been explained with only 10 macro variables, such recommendations are probably not likely to overwhelm other factors.

For sociologists—who must necessarily approach reputational pro-

<sup>41</sup> Groups responding to the survey indicated that 59% had gone on to produce the same show elsewhere and 64% had used Edinburgh reviews for advertising purposes after the festival.

<sup>42</sup> A survey of cab drivers was conducted, as a possible indicator of this dimension. However, it was quickly determined that Edinburgh cabbies either do not know as much as they are reputed to, or are not willing to tell.

cesses in legitimate and popular art with relativistic enthusiasm—two overwhelming ironies argue for more attention to reviews and other forms of secondary discourse. In the performing arts, unlike painting, television, sculpture, film, architecture, and literature, the only remnant of performance after the moment of production is a review. A transcript or a recording is not the artwork itself. David Garrick will always be known through his reviews; Lenny Bruce was filmed but not captured. We are less tempted to argue that reputation is a function of quality.

For all genres, reviews, disseminated through the mass media and through social interaction, may be more widely experienced than the artwork itself.<sup>43</sup> The extent to which they determine reputation in a variety of fields remains unexplored.

## APPENDIX

The following coding scheme was used in generating a measure of review modality.

### (-2) *Very negative*

- (a) virtually all negative phrases/statements
- (b) reviewer clearly dislikes performance
- (c) positive aspects unmentioned or minor
- (d) reviewer advises avoidance (without qualification)

### (-1) *Somewhat negative*

- (a) negative statements dominate positive ones either by emphasis, placement (first or last), or quantity (more negative statements than positive), but still significant positive aspects to show
- (b) mainly descriptive but some negative phrases

### (0) *Neutral or no review*

- (a) descriptive (no evaluative statements) *or*
- (b) equal emphasis on positive and negative aspects
- (c) cannot tell whether reviewer endorses show

### (1) *Somewhat positive*

- (a) positive statements dominate negative ones either by emphasis, placement (first or last), or quantity (more positive statements than negative), but still significant negative aspects to show
- (b) mostly descriptive but some positive phrases

<sup>43</sup> A related survey of audiences at 1989 Festival of Israel performances reveals that 23% of attenders had heard about reviews that they *did not read personally* (Dafna Goldberg, personal communication). Overall evaluations presented in reviews circulate among potential attenders. It would be unwarranted to assume that reviews have only a readership effect.

(2) *Very positive*

- (a) virtually all positive statements/phrases
- (b) reviewer clearly endorses
- (c) negative aspects unmentioned or minor
- (d) reviewer advises attendance (without qualification)

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# **The Vietnam Veterans Memorial: Commemorating a Difficult Past<sup>1</sup>**

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The problem of commemoration is an important aspect of the sociology of culture because it bears on the way society conceives its past. Current approaches to this problem draw on Émile Durkheim and emphasize the way commemorative objects celebrate society's former glories. This article on the Vietnam Veterans Memorial deals with the way society assimilates past events that are less than glorious and whose memory induces controversy instead of consensus. The Vietnam War differed from other wars because it was politically controversial and morally questionable and resulted in defeat; it resembled other wars because it called out in participants the traditional virtues of courage, self-sacrifice, and honor. The task of representing these contrasting aspects of the war in a single monument was framed by the tension between contrasting memorial genres. Focusing on the discursive field out of which the Vietnam Veterans Memorial emerged, this analysis shows how opposing social constituencies articulated the ambivalence attending memories of the Vietnam War. Ambivalence was expressed not only in the Vietnam Veterans Memorial's design but also in the design of Vietnam War monuments later erected throughout the United States. These efforts to memorialize a divisive war, along with attempts in other nations to come to terms with the difficulties of their past, call into question Durkheim's belief that moral unity is the ultimate object of commemoration. The Vietnam Veterans Memorial and devices like it come into view not as symbols of solidarity but as structures that render more explicit, and more comprehensible, a nation's conflicting conceptions of itself and its past.

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Dear son of memory, great heir of Fame,  
What's need'st thou such weak witness of thy name?  
[JOHN MILTON, "On Shakespeare" (1630)]

In this article, we address two problems, one general and one particular, and claim that they are best approached by referring each to the other. The first, general, problem is that of discovering the processes by which culture and cultural meaning are produced. Collective memory, moral and political entrepreneurship, dominant ideologies, and representational genres are all refracted through these processes and must all be sociologically identified and gauged. The second, particular, problem is the Vietnam Veterans Memorial. This unusual monument grew out of a delayed realization that some public symbol was needed to recognize the men and women who died in the Vietnam War. But its makers faced a task for which American history furnished no precedent—the task of commemorating a divisive defeat.

By dealing with the problem of commemoration in this case study of the Vietnam Veterans Memorial, we can address general concerns in the sociology of culture. Our concentration on the details of a particular case follows Clifford Geertz's maxim that "the essential task of theory building . . . is not to codify abstract regularities but to make thick description possible, not to generalize across cases but to generalize within them" (1973, p. 26). However, we are also concerned to locate commemorative formulas as they are repeated across cases. Thus we will be moving from the case of the Vietnam Veterans Memorial to monuments that have similarly vexed commemorative missions, seeking to bring together the resemblances and differences under a single analytic framework.

We take up our subject by tracing the social, political, and cultural trajectories of the negotiation process that resulted in the Vietnam Veterans Memorial. That process confronted several distinct, but related,

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problems: (1) the social problems of fixing painful parts of the past (a military defeat, a generation of unredemmed veterans) in the public consciousness, (2) the political problem of commemorating an event for which there is no national consensus, and (3) the cultural problem of working through and against traditional expectations about the war memorial genre.

#### DEDICATION

On November 11, 1982, seven years after the last American died in Vietnam, the Vietnam Veterans Memorial was dedicated. Immediately before the dedication ceremony, 150,000 spectators watched and applauded as 15,000 veterans passed before them. Elaborate floats and flyovers by fighter planes and helicopters embellished the three-hour parade. The more solemn aspects of this colorful Veterans Day had been established by the reading out of the names of all 57,939 Americans killed in Vietnam in an earlier 56-hour candlelight vigil at the National Cathedral. The president of the United States participated in the observance, lighting a candle for the dead and listening to part of the long roster of names.

From the very beginning of these commemorative rites, the themes of recovery and solidarity were repeated. The motto of the Veterans Day parade, "Marching along Together," reflected these themes and prefaced the dedication day invocation: "Let the Memorial begin the healing process and forever stand as a symbol of our national unity." The rhetoric, however, expressed an ideal, not a reality. If official spokesmen defined the Memorial as a way "to unite our beloved America with her bravest and best," the bravest and best were inclined to ask what took so long. As one veteran put it: "They should have had this when we first came back in 1971." Secretary of Defense Casper Weinberger conceded the delay, but added, "We have finally come to appreciate your sacrifice." Likewise, President Reagan announced that everyone is now "beginning to appreciate that they were fighting for a just cause," as he contemplated the list of those who died for it (*Washington Post*, November 14, 1982, Sec. A, pp. 1, 18, 20; *New York Times*, November 11, 1982, Sec. A, p. 1).

Many people disagreed with the president's assessment. The dedication ceremony itself began with words of contrition rather than unequivocal appreciation: "We ask for grace to face our past." And at the solemn wreath-laying ceremony—the emotional highpoint of the dedication—a bitter voice arose from the crowd: "What were we fighting for?" (*U.S. News and World Report*, November 22, 1982, p. 66). No one can claim that Americans have reached a unified answer to that question.



## DILEMMAS OF COMMEMORATION

The memory of the Vietnam War and its epoch takes place within a culture of commemoration. Current analytic approaches to culture define commemorative objects, and cultural objects in general, as "shared significance embodied in form" (Griswold 1987*a*, p. 13). However, our concern is in formulating an approach to those kinds of commemoration for which significance is not shared.

One of the most influential perspectives on the social functions of commemoration is Émile Durkheim's. Commemorative rites and symbols, Durkheim tells us (1965, p. 420), preserve and celebrate traditional beliefs; they "serve to sustain the vitality of these beliefs, to keep them from being effaced from memory and, in sum, to revivify the most essential elements of the collective consciousness. Through [commemoration] the group periodically renews the sentiment which it has of itself and of its unity." Associated with Durkheim's conception is a rich research tradition that includes works by Maurice Halbwachs (1941, 1950), Robert Hertz (1965), Lloyd Warner (1959), Bernard Barber (1972), Edward Shils (1981), and David Lowenthal (1985), among others. These works, like Durkheim's, emphasize the way commemorative monuments integrate the glory of society's past into its present concerns and aspirations. They assume that the events or individuals selected for commemoration are necessarily heroic or, at the very least, untainted. In this view, commemoration is governed by a kind of pleasure principle that produces a unified, positive image of the past. But suppose a society is divided over the very event it selects for commemoration. Suppose that event constitutes a painful moment for society, such as a military defeat or an era of domestic oppression.<sup>2</sup> What kinds of "traditional beliefs" and "essential elements," and what kind of monuments, if any, can crystallize these moments and unify the society around them? How is commemoration without consensus, or without pride, possible?

The Vietnam Veterans Memorial provides a good case to use in thinking about these issues. The succession of events that led to the Memorial's creation and public reception was a culture-producing process. In that process, contrasting moral evaluations of the Vietnam War and its participants were affirmed. The process itself consisted of seven stages, each defined by the activity of different individuals and different institutions: (1) the Pentagon's decision to mark the war by an inconspicuous plaque in Arlington Cemetery; (2) congressional activity culminating in a Vietnam Veterans Week and a series of veterans' support programs; (3) a former Vietnam soldier's conception and promotion of a tangible monu-

<sup>2</sup> Current efforts in the Soviet Union to memorialize Joseph Stalin's victims provide a recent example of efforts to commemorate the oppression of civilian populations.

ment; (4) intense controversy over the nontraditional monument design selected by the United States Commission of Fine Arts; (5) modification of this original design by the incorporation of traditional symbols; (6) the public's extraordinary and unexpected reaction to the Memorial; and (7) the ongoing controversy over its further modification. Our analysis will pass through these stages as we chart the Vietnam Veterans Memorial's development.

From a comparative perspective, the moral evaluations reflected in the Vietnam Memorial derive from a formula common to all societies that seek to commemorate controversial military ventures. When the cause of a lost war is widely held to be immoral or at best needless, then, in James Mayo's (1988, p. 170) words, "defeat . . . cannot be forgotten and a nation's people must find ways to redeem those who died for their country to make defeat honorable. This can be done by honoring the individuals who fought rather than the country's lost cause." This commemorative formula, as will be shown, has been expressly invoked to justify the marking of the Vietnam War. However, it also justifies the marking of wars that resemble the one fought in Vietnam. When Israeli officials speak in ceremonies occasioned by the Lebanon War, they extol its soldiers in words that are vivid and inspiring. Their remarks on the war itself are vague and pointless. They affirm the war as a historical entity but deny it an elevated place in the national experience. The event is swallowed, as it were, but never assimilated. Such is the memory of "Israel's Vietnam": a misbegotten cause nobly pursued.<sup>3</sup> The dualism of cause and participant is similarly dramatized in the American South. Confederate Memorial Day ceremonies throughout the South vary from one place to the next, but one thread unites them all, and that is the determination to honor the gallantry of the Confederate soldier, without mention of secession and slavery. It was this same principle—the separation of the men from their cause—that President Ronald Reagan's supporters invoked to justify his visit to Bitburg to honor Nazi Germany's war dead.<sup>4</sup> The Soviet Union, after its evacuation of Afghanistan, also faces questions on how to recognize men who fought and lost a war. In an unprecedented gesture of kindness toward its own prisoners of war, the Soviet government not only accorded the benefit of doubt to those whose conduct during imprisonment was uncertain, but also declared that "forgiveness toward POWs who succumbed to enemy pressure [is] a necessary part of the national healing process" (*New York Times*, June

<sup>3</sup> Personal communication from Gideon Aran, Department of Sociology, Hebrew University, Jerusalem, Israel.

<sup>4</sup> A detailed analysis of the Bitburg controversy is contained in Schmitt (1989).

14, 1988).<sup>5</sup> "National healing"—precisely the need invoked in America to justify the honoring of the Vietnam soldiers. And if the Soviet Union's willingness to forgive those who abandoned its cause betrays a general doubt about the merit of the cause itself, it is the same kind of doubt that once plagued America.

### Commemoration as a Genre Problem

Controversies over the merits of a war are expressed at some point in debates over measures taken to commemorate it. The stages in the Vietnam Memorial's construction reveal, on the one hand, the desire for a design that reflects the uniqueness of the Vietnam War and, on the other, the desire for a design that recognizes the sense in which the Vietnam War was similar to previous wars. The Vietnam War differed from other wars because it was controversial, morally questionable, and unsuccessful. It resembled other wars because it called forth in its participants the traditional virtues of self-sacrifice, courage, loyalty, and honor. Tension between alternative commemorative designs centers on the problem of incorporating these contrasting features into a single monument.

Distinctions among war monuments are, like all generic distinctions, produced by "sorting, seeing the similarities in different . . . objects, abstracting the common elements from a welter of particular variations" (Griswold 1987a, p. 17). Genre, in Wendy Griswold's view, is a kind of schema that organizes perception. Griswold asserts, however, that literary and artistic genres are impermanent and express the changing character of their creators, audiences, and contexts. This conception of genre is relevant to our present problem: What kind of monument can be built in the context of changes in traditional beliefs about what war monuments should look like and represent? Since no slate of tradition can be wiped totally clean, however, definite limits to the negotiability of commemorative genres must be assumed. To generalize this assumption, any analysis of a cultural object must chart and interpret its generic limitations. When, for example, is a tragedy no longer a tragedy? When is a war memorial no longer a war memorial? This matter, the negotiability of genre, is germane to our study. Is there some essence of "war memorialness" and can people identify it? Most important, how does this generic essence translate conflicting ideas about the Vietnam War into the monument-making process? How does it contribute to the task of incorporating painful events into the collective memory?

<sup>5</sup> For a discussion of the common postwar adjustment problems of Vietnam and Afghanistan veterans, see *Atlanta Journal* (October 19, 1988), p. 2A; *New York Times Magazine* (June 11, 1989), p. 60 ff.

We believe a clue to this question lies in the disrupted expectations associated with the design of commemorative monuments. In the case of war memorials, traditional expectations are satisfied by a variety of forms, including memorial buildings, realistic statues of fighting men, obelisks, arches, granite monoliths, and other structures that prominently name the war being commemorated and combine particular physical elements, including vertical preeminence, grandness of size and lightness of color, with national symbolism. If all these traditional memorial forms are rejected in favor of a new one, as was the case in the original design of the Vietnam Veterans Memorial, then questions must be raised about what the new form seeks to represent. The topics of such questions include: (1) the nature of the war (declared vs. undeclared; just vs. unjust; victory vs. defeat); (2) the nature of the nation's response to the war (consensus vs. dissensus); (3) the nature of the public's reading of the returned veterans' social status (heroes vs. deviants); (4) the political climate of the times (conservative vs. liberal); and (5) the nature of political action (majoritarian vs. constituency-based interest groups).

#### METHOD

Attitudes and interests are translated into commemorative forms through enterprise. Before any event can be regarded as worth remembering, and before any class of people can be recognized for having participated in that event, some individual, and eventually some group, must deem both event and participants memorable and must have the influence to get others to agree. Memorial devices are not self-created; they are conceived and built by those who wish to bring to consciousness the events and people that others are more inclined to forget. To understand memorial making in this way is to understand it as a construction process wherein competing "moral entrepreneurs" seek public arenas and support for their interpretations of the past. These interpretations are embodied in the memorial's symbolic structure.

Efforts to connect cultural objects to a people's social experience rarely attend to this kind of process. Edward Shils and Michael Young's (1953) account of the Coronation, Clifford Geertz's (1973) work on the Balinese cockfight, Lucien Goldmann's (1964) analysis of Racine's plays—these exemplary works, among others, seek to align synchronically the symbolic structure of cultural objects with the mental structures of the society. Without denying the plausibility of these particular investigations, we can recognize two shortcomings in their method. First, the method admits of contestable conclusions because an astute observer can always find something in the society for a given cultural object to reflect. Second,

the method draws attention to what the cultural object is and what it represents but not to how the object came to be what it is and how it came to represent what it does. Analysis of the Vietnam Veterans Memorial made these shortcomings apparent to us. Looking at this Memorial at a given point in time, we could find no way to "decode" it, no way to articulate its relation to society. Only by accounting for its inception and development over time did we come to know how the Memorial's symbolic structure expresses or emerges from the society's values and remembrance of the war.

We have therefore designed a study that draws on three distinct, yet compatible, methodological approaches. Together, they will allow us to reproduce and interpret the context in which the Vietnam Veterans Memorial is set. We will develop (1) a "thick description" of a specific case—an ethnography that aims at uncovering the "conceptual structures that inform our subjects' acts" (Geertz 1973, p. 27), (2) a discourse analysis that is sensitive to the inscriptions of meaning (both verbal and visual) in social contexts, and (3) a comparative methodology that leads to general conclusions.

Our use of the methodology of discourse analysis requires some elaboration. Drawing our analysis through the "discursive surround" of a cultural object, we are systematically attending to the social talk and social gestures that constitute and interpret the object in time and space. Our assumption is that specific worldviews inhere in the specialized discourses of social organizations, which include political, mass media, and military organizations. These worldviews involve ideas of what it is to be a human being in society and how human beings ought to be represented. Discourse analysis moves back and forth between organizations and the contours of their worldviews by attending to the specific words and acts of organizational members. From the most micro-level lexical features (the use of abstract vs. concrete words, for example) to syntactical features (use of active or passive voice) to overarching allegorical figures, a given discourse can be interrogated and its worldview delineated.

This type of analysis works with presumptions of genre consistencies and is thus interested to discover, in the context of a broader project of relating discourse to social setting, genre inconsistencies. In terms of verbal discourse about war memorials, this analysis includes the noting of unexpected combinations (heroism and defeat), repetitions, excess, and absence (words and concepts either appearing overabundantly or not at all). In terms of visual discourse about war memorials, it involves a semiotic process of recognizing the positioning and normative evaluation of dyadic oppositions to which the given culture specifically attends (e.g., high-low, black-white, concrete-abstract).

This methodology involves examination of the Vietnam Veterans Memorial as it evolves over time. We perform thick descriptions of the Memorial's interaction with its context and show how this interaction crystallizes the way the Memorial is received and responded to. The addition of a comparative analysis of other difficult commemorative projects allows us to draw thick description into the more general project of formulating the relation between commemoration and its genres.

Theoretical and methodological issues thus feed on one another. Durkheim and his followers formulated notions of commemoration that were applicable to positive events on whose significance all could agree. In contrast, we seek to understand the commemoration of negative events. Negative events, as we define them, do not include injuries and other harm unjustly inflicted by an enemy—as occur in lost causes honorably pursued or cruelty and suffering bravely endured. Negative events are moral traumas: they not only result in loss or failure but also evoke disagreement and inspire censure. But these traumas cannot always be ignored without denying their noble side, without forgetting commitments and sacrifices that would be considered heroic in the service of other ends. It is precisely this tension that our methodology is designed to reveal and that our theory is designed to articulate.

*Data collection.*—When the realities of a particular social experience, such as the Vietnam War, thrust themselves against previously formed assumptions, individual and institutional discourses must realign their terms or remain incapable of making that war understandable. This adaptation is expressed in every aspect of the Vietnam Veterans Memorial's development. Our focus on this development prompted us to examine the discourses of such relevant institutions and individuals as Congress, the Commission of Fine Arts, the mass media, the Memorial's designers and visitors, among others. We found much of this discourse in the *Congressional Record*, dedication speeches, Veterans Day oratory, and commentaries appearing in newspapers and magazines. In addition, many written messages addressed to the dead soldiers are being left at the Memorial by friends and relatives. A sample of 250 of these documents includes statements about the significance of the Memorial itself. A different layer of the Memorial's meaning was the object of observations we made at the site and of similar observations reported by informants. Also, we obtained from the Department of the Interior a partial inventory of objects left at the Memorial since its completion. Typically presented in memory of the dead by family and friends, these objects range from national symbols, like flags, to private possessions, like toys or articles of clothing that once belonged to the deceased. All such tokens are gathered up from the Memorial site by the National Park Service at the end of each day and, along with the written correspondence, are

cataloged and stored at the Museum and Archaeological Regional Storage Facility in Lanham, Maryland, where we inspected them.<sup>6</sup>

No one segment of this material provides much useful information. It takes the total body of material, duly combined and arrayed in proper sequence, to reveal the unfolding of commemorative meaning.

#### A NATION'S GRATITUDE: SEARCH FOR A GENRE

The first official recognition of the Vietnam veteran was not bestowed until 1978, three years after the last American was flown out of Saigon. The recognition itself was hesitant and uncertain. A Vietnam War crypt had already been prepared in the Tomb of the Unknown Soldier, but the Army determined that neither of its two unidentified bodies (only 30% of the remains in either case) made for a decent corpse. Instead of honoring its Vietnam battle dead by symbolically joining them, through entombment of unknown soldiers' remains, with men fallen in earlier wars, the army recommended that a plaque and display of medals be set apart behind the tomb, along with the following inscription: "Let all know that the United States of America pays tribute to the members of the Armed Forces who answered their country's call." This strange declaration bears no reference at all to the Vietnam War, and it required an act of the Veterans Affairs subcommittee to make it more specific: "Let all people know that the United States pays tribute to those members of the Armed Forces who served honorably in Southeast Asia during the Vietnam era" (*The Nation*, April 8, 1978, p. 389). In even this second, stronger statement, three things are noteworthy: (1) although revised in Congress, the statement was initiated by the military; (2) it received little publicity; and (3) it designated the conflict in Vietnam by the word "era"

<sup>6</sup> In November 1986, a staff member of the Museum and Archaeological Regional Storage (MARS) Facility turned over to us, for inspection at the site, photocopies of all written correspondence left at the Memorial wall and collected up to that point. In sampling both genres (letters, poems, memos, greeting cards, business cards, flyers, etc.) and themes (comments on the war, comments on the Memorial, comments on individual soldiers, government officials, family members, etc.), we wanted to avoid redundancy and to collect a representative assortment and number. Of the approximately 350 written items examined, 250 were copied and later analyzed. The National Park Service's publicly circulated inventory of material objects, on the other hand, is complete but limited as to period of coverage. The inventory began in November 1984 (when the Memorial's statue was unveiled) and was sharply cut back in September 1985 for budgetary reasons. The collection and storage of objects, however, continued after September 1985, and these objects are available for inspection at the MARS facility. Finally, our on-site observations consisted of four separate visits to the Veterans Memorial and one visit to the Moving Wall between 1986 and 1989. These contacts, which total about 10 hours, do not include visits to local Vietnam War monuments. During each visit our observations were entirely unstructured.

rather than "war." Thus the recognition came from only a small part of the society for whose interests and values the war was fought; it was communicated to that society without conspicuous ceremony; and it betrayed confusion about the meaning of the war by its failure to find a word to describe it. This last point is the most noteworthy of all. Although a war had not been officially declared, many congressional resolutions during the 1980s referred to the hostilities in Vietnam as "the Vietnam war." Touchiness during the late 1970s about what to call the conflict stemmed from social, not legal, concerns. To name an event is to categorize it morally and to provide an identity for its participants. Anomalous names betray ambiguity about an event's nature and uncertainty about how to react to the men who take part in it.

The first solution to the war's commemorative genre problem was thus halting and uncertain. The fighters were honored but not by an imposing monument. They were honored by a plaque, inconspicuously placed, whose inscription was, itself, indirect and muted. Undeclared wars are usually fought with restraint, however violent they might be. The Vietnam War's first official commemoration mirrored this restraint, marking the cause without really drawing attention to it.

Official ambivalence toward the Vietnam War showed up next in the activities of Congress. It was in Congress, in fall 1978, that the work culminating in the Veterans Memorial began. The plan then discussed, however, was not to commemorate those who had died in the war, but to set aside a special "Vietnam Veterans Week" for its survivors. Thus evolved a second solution to the problem of finding a genre to commemorate the Vietnam War. Time, rather than granite, the dedication of a week rather than the dedication of a tangible monument, sufficed to honor the Vietnam fighting man. This plan's principal entrepreneurs were the members of the Vietnam-Era Caucus, 19 U.S. representatives and senators who had served in the military during the Vietnam War years. They meant to achieve two goals: to unify a nation divided by war and to induce Congress to recognize that many war veterans were suffering from unmet needs. Before anything could actually be accomplished, however, certain obstacles had to be overcome, obstacles inherent in the object of commemoration itself.

To promote unity by separating the event from its men was Congress's first concern. In Congressman Grisham's words, "We may still have differing opinions about our involvement in the Vietnam War, but we are no longer divided in our attitudes toward those who served in Vietnam" (U.S. House of Representatives 1979, p. 12588). At one time, however, the division was deep. Grisham himself acknowledged that the veterans were stigmatized or, at best, ignored on their return from the



battlefront. No ceremony dramatized and ennobled their sacrifices. Most of the other congressmen knew this, and they wanted to upgrade the veterans' status. Transforming the Vietnam soldier from an Ugly American into a patriot who innocently carried out the policy of elected leaders, Congress tried to create a positive image that all Americans could accept.

However, the very attempt to improve the veterans' status raised unsettling questions. Congressmen openly recognized that America's lower-income minorities were disproportionately represented in the armed forces and that the trauma of war bore more heavily on them, economically and psychologically, than it would have on a middle-class army. An uncomplimentary view of the returning soldier accompanied this recognition. The congressmen made no mention of the crimes allegedly committed by American soldiers in Vietnam; however, they did recognize publicly "statistics such as the fact that 25 percent of the persons incarcerated in correctional institutions in America are veterans of the Vietnam War," along with the veterans' need for "an expanded drug and alcohol abuse treatment and rehabilitation program." Family counseling needs were also described: "Of those veterans married before going to Vietnam almost 40 percent were divorced within six months of their return" (U.S. House of Representatives 1979, pp. 12589, 12593, 12584; for details, see Johnson [1976, 1980]; U.S. House Committee on Veterans' Affairs 1981). Congresswoman Mikulski recognized the veterans' social marginality by pleading for the government to "be responsive to the unique problems which they face . . . so that they will be better able to fill their roles in society." Congressman Mikva spoke to the same point. Existing veterans' programs, he explained, are not enough for this group. "We must back up this symbolic recognition of their efforts for our country with . . . educational and rehabilitative programs geared to their special needs" (U.S. House of Representatives 1979, pp. 12583, 12588). Here, as elsewhere, the emphasis is on the veterans' shortcomings, and this emphasis reflects society's desire to reconstitute them morally.

It is in this last aspect of congressional discussion that we gain access to the deeper layers of the text being written about the veterans. This text, as presented in the *Congressional Record*, both reveals and participates in a moment of transition in the official assessment of the Vietnam veteran. Our reading of the text locates a residual suspicion about the veterans' psychological and moral status. When one notes all the negative references to the veterans—their employment problems, their physical problems, their psychological problems, their sense of alienation, their inclination toward drugs and crime—it becomes evident that an idiom more relevant to social deviants than to returning soldiers dominated

congressional discourse. And this discourse cuts deeper and seemingly truer insofar as its topic included men who had been the agents, if not the architects, of America's first military defeat.

Never during the progress of this discussion did its participants express the desire to memorialize the heroic side of the Vietnam War. They felt that war memories could be expressed suitably in a Vietnam Veterans Week and in a series of veteran rehabilitation programs. A marked utilitarianism became a key part of this commemorative project.

#### ENTREPRENEURS AND SPONSORS

Negative characterizations of the Vietnam veteran might have eventually undermined his positive recognition were it not for a new development, one that was oriented less to the living than to the dead. During the time that the Vietnam-Era Caucus worked on its legislation, a former army corporal from a working-class family, Jan Scruggs, had independently decided on a plan of his own. As noted above, one of the premises of Vietnam Veterans Week was that the soldier must be separated from the cause. This separation is precisely what Scruggs aimed to celebrate publicly. At first, his idea attracted little notice, but it eventually overshadowed Vietnam Veterans Week in commemorative significance. He would build a memorial to the men who served in Vietnam and would inscribe on it the names of all the war dead. The plan represented a different solution to the commemorative genre problem than those previously proposed. It was different in that it combined the traditional idea of a stone monument to the war dead with the radical idea of excluding from it any prominent symbol of national honor and glory. In place of such a symbol would appear a list of the dead soldiers' names—58,000 of them. On May 28, 1979, Scruggs announced the formation of the Vietnam Veterans Memorial Fund to raise money to build the monument.

The accumulation of money to build the Veterans Memorial did not automatically follow from the desire to build it. What needed to be overcome was not only opposition from the still vocal critics of the war,<sup>7</sup> but

<sup>7</sup> "Let's not perpetuate the memory of such dishonorable events [the Vietnam War] by erecting monuments to them," wrote a former antiwar advocate in a letter to Jan Scruggs. It was a typical letter in that the "chief source of potential opposition" to any veterans memorial was, in Scruggs's view, "the antiwar movement" (*National Geographic* [May 1985], p. 558). To commemorate the soldier was, from this viewpoint, to insult the true heroes. In the words of another war opponent: "Buttering up Vietnam veterans as 'forgotten heroes' is a slap in the face directed at millions in this country who resisted the war" (Hess 1983, p. 126). These sentiments were expressed throughout the Memorial's development. Thus, when the Commission of Fine Arts conducted hearings on the addition of a statue to the Memorial site, the antiwar voices were heard again. Why would anyone want a "literal representation" of the American

more important, a sense of uncertainty in the public at large as to what the monument would look like and what it would represent. These suspicions and uncertainties were relieved when the Memorial's original framing rule—"Honor the soldier, not the cause"—was reiterated in the very selection of its sponsors. Chosen were men and women who differed visibly and widely on many political questions but shared the desire to honor the Vietnam veterans. The sponsoring leaders and celebrities included Vernon Jordan, president of the National Urban League; Ruben Bonilla, national president of the League of United Latin American Citizens; Carol Burnett, the actress who played the mother of a soldier killed in the war in the television drama, *Friendly Fire*; First Lady Rosalynn Carter and former First Lady Betty Ford; Father Theodore Hesburgh, president of the University of Notre Dame; Bob Hope; Rocky Bleir, described as a "wounded Vietnam veteran who came back to star with the Pittsburgh Steelers"; and Admiral James B. Stockdale, formerly a prisoner of war and now president of The Citadel. These individuals represented many sectors of society: blacks, Hispanics, women, religious and academic figures, entertainment and sports celebrities, and military men. With the support of this noncontroversial coalition of sponsors, funds were quickly raised to pay for design and construction costs and, by July 4, 1980, a few days after the proclamation of Vietnam Veterans' Week, President Carter signed a joint resolution that reserved a two-acre site in Constitution Gardens, between the Washington Monument and Lincoln Memorial, for the Veterans Memorial's placement.

But if Scruggs's plans were proceeding apace, the ambiguous image of the Vietnam veteran was again evoked, this time by the mass media. Unlike in the congressional debates, however, the evocation here was oblique. One needed to read between the lines. Now Jan Scruggs himself was the object of representation. The different accounts of Scruggs's moment of "inspiration" in the spring of 1979 disclosed different visions of the Vietnam veteran. Furthermore, these accounts revealed the kind of moral entrepreneur that the sponsoring institutions were willing to support. For these institutions, the merit of the Memorial project turned on the credibility of its promoter.

### The Case of Jan Scruggs

Most accounts of Jan Scruggs's memorial-making efforts began with a phrase like: "Ten years after he was seriously wounded by an enemy

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role in Vietnam? asked one witness. The memorable images of the war, this witness went on to say, include not heroic military feats but rather a naked child running from her burning village, a South Vietnam officer shooting an unarmed guerilla through the head, and the National Guard shooting down students at Kent State.

grenade . . ." The fact that Scruggs was recognized as a wounded veteran is very important. Wounds in general play a significant role in the discourse about the Vietnam veterans and their memorial. That Scruggs's wounds are invariably noted means that he is understood to speak authoritatively for the needs of the veterans. Wounds here are legitimating marks. The body of the veteran is, itself, the proof of intimate experience with war, of courage and manhood. Scruggs's wounds make him a generalizable veteran, a collective representation in his own right. This characterization of Scruggs as, first and foremost, a wounded veteran has the effect of invoking the traditional notion of war hero. With that invocation, the traditional notion of a war memorial becomes more plausible.

Scruggs's wounds also resonate with and help to resolve the negative image of the generic Vietnam veteran. The most redeemable veterans were those who had, quite literally, died from their wounds. It is their names alone, after all, that appear on the Memorial wall. The least likely candidates for commemoration were those who had escaped the war unscathed. However, Jan Scruggs, the veteran who carries 11 pieces of a grenade in his body, acts as a perfect mediator between the living and the dead. He is so perfect because he shares something with both. He has suffered for his participation in a bad war and has lived to redeem his fellows.

After Scrugg's battle wounds are revealed, the story of his idea to build a memorial diverges along three different paths. Whether these three versions are all true or consistent with one another is unimportant. What is important about the stories is that they provided an image that supporters of the monument project could think with, an image they could use in their struggle against their own doubts and against the project's opponents. The basic story is that the idea for a memorial came to Scruggs one night after he saw the film *The Deerhunter* (see, e.g., *Time*, July 14, 1980, p. 23). In this story, Scruggs is inspired by a fictional account of the war in which he had fought. Earlier films about Vietnam had depicted the war's alienating effects; this film did the opposite: it portrayed the common man's continued devotion to his country, despite personal tragedy, and so affirmed his right to the country's admiration.

In the second story, Scruggs's decision is influenced by Robert Jay Lifton's work on "delayed stress syndrome," which he had read before seeing *The Deerhunter* (*Esquire*, September 1985, p. 64). Here the moral entrepreneur derives his inspiration and authority not only from popular culture but also from science. This rendition seems positive, but its contents raise all the old doubts because the book that Scruggs is depicted as reading addresses the problems of readjustment experienced by so many veterans: flashbacks, unemployment, drug abuse, and violence. However, this rendition also reconstitutes the veteran, mitigating his

moral shortcomings by transforming them into medical and psychological problems.

In the final inspirational allegory, Scruggs gets his idea for a memorial while “nursing a bottle of bourbon” in contemplation of *The Deerhunter* (*U.S. News and World Report*, November 22, 1982). This scene is solitary and lonely in a way that seeing a movie or even reading a book is not. It also introduces the theme of alcohol, one of the several problems commonly believed to afflict the Vietnam veterans. The image of “nursing” a bottle might indicate despair were it not for the fact that Scruggs has been gainfully employed at the Department of Labor since his return from Vietnam. That the bottle he is nursing contains bourbon (the prosperous man’s drink) is symbolic of his personal stability. While many articles refer to him as a former “grunt” (enlisted man, as were most of the war’s social casualties), Scruggs is represented as having successfully negotiated his transition back to civilian life.

These characterizations set forth in its most coherent form an image that began to evolve the very moment Scruggs became a public figure. From the start, he was the sympathetic subject of popular media representations. For Congress he was a representative man, a living symbol of America’s hard-working, law-abiding veterans. The 1987 television movie *To Heal a Nation* (based on Scruggs’s book of the same title) shows that this perception has been as plausible in recent years as it was 10 years ago. In this movie, Scruggs and the Memorial get equal billing. Scruggs embodies the Memorial. He embodies it now, as he did then, in a multivocal way. Conceding that the Vietnam War would never be deemed justifiable, he appealed to those who opposed it. Having fought himself, and knowing how his comrades thought and felt about the war, he appealed to the veterans and their supporters. The Scruggs image was instrumental, not in preventing or ending the debate over the Veterans Memorial, but in reflecting it. In this way, Scruggs enlisted the patronage of men and women of differing and even opposing points of view. A less attractive man would have been less able to capitalize on Congress’s sense of its debt to the veterans.

It was the redemptive qualities of Scruggs’s project—precisely, its embodiment of gratitude, the only currency for paying off a moral debt—that congressional supporters emphasized. As President Carter approved Congress’s resolution, he expressed his belief that the formal honoring of the veteran would also promote the healing of a nation divided by war. To this end, the Memorial fund’s directors continued to avoid political statements in both fund-raising efforts and in contemplation of the Memorial design. The universal support of the Senate and strong support of the House were based on this same requirement: that the Memorial make no reference to the war, only to the men who fought

it. Political neutrality was the condition for the support of other sponsoring organizations, including the Reserve Officers Association, Veterans of Foreign Wars, Marine Corps League, Retired Officers Association, and American Gold Star Mothers. These organizations had been assured by Scruggs that the Memorial "will stand as a symbol of our unity as a nation and as a focal point of all Americans regardless of their views on Vietnam" (U.S. House of Representatives 1980, p. 4805). Indeed, its very name would be noncontroversial: it would be a "Veterans Memorial" rather than a "War Memorial." The federal agencies responsible for approving the final design and placement of the Memorial, particularly the Commission of Fine Arts and the Department of Interior, were guided by this same principle.

An apolitical monument was thus supported by the apolitical makeup of its sponsoring agencies. For popular wars the makeup of such groups is less important, since consensus on the object of commemoration already exists. The range of political support for a Vietnam Memorial was stressed precisely because political consensus on the Vietnam cause was minimal. Scruggs's solution to the genre problem was not implemented until it attracted the support of a political spectrum wide enough to make his solution credible, or so it seemed.

#### VISION AND REVISION: FROM PURE TO MIXED GENRE

Recreating the context and process out of which the Vietnam Veterans Memorial developed, we came to see it not as a monument that ignores political meanings, but as a kind of *coincidentia oppositorum*—an agency that brings these opposed meanings together without resolving them. In this regard, the first and most fundamental point to emphasize is the nation's failure to reach an agreement on the Vietnam War's purposes and consequences. Hence there is a "genre problem": how to create a memorial that celebrates the virtues of the individual veteran without reference to his cause.<sup>8</sup> As this criterion was set beside the attitude of the Congress toward the Vietnam veteran, an attitude that combined anxiety about his moral shortcomings (crime, drugs, and alcohol) with gratitude for his sacrifices, there arose pressures in the government to specify the Memorial's essential contours before it invited artists to submit their own designs. Informed by ambivalence about both the cause and its participants, these specifications pushed the Memorial in the direction of the muted and unobtrusive. Thus, in a formal letter approving the design

<sup>8</sup> See Greenblatt (1983) for a discussion of Albrecht Durer's monumental solution to the obverse problem: how to celebrate the virtue of a cause without reference to its participants.

competition, Department of Interior official Bill Whalen explained to the chairman of the Subcommittee on Parks, Dale Bumpers: "Since the proposed memorial is of great significance, and does not memorialize a single person or event, but rather a 10-year period of our Nation's history and is envisioned as a landscaped solution emphasizing horizontal rather than vertical elements, we concur with the report which indicates that a site in Constitution Gardens is preferable" (U.S. Senate 1980, p. 9434). Whalen clearly views the memorial as significant and noteworthy, yet he understands that a problem inheres in the design of any monument to commemorate this particular "10-year period." As significant as it might be, the memorial cannot be grand, vertical, or heroic. Like any "landscaped solution," it must hug the ground. It must be modest, horizontal, and nonheroic.

The memorial chosen by the Commission of Fine Arts from the more than 1,400 designs submitted was, indeed, the simplest and least imposing: two unadorned black walls, each about 250 feet in length, composed of 70 granite panels increasing in height from several inches at the end of each wall to 10 feet where they come together at a 125 degree angle. Although this angle aligns the two walls with the Lincoln Memorial and Washington Monument, the walls themselves are placed below ground level, invisible from most vantage points on or near the Mall. The Vietnam War is thus defined as a national event, but in a spatial context that brackets off that event from those commemorated by neighboring monuments. The walls add to this sense of detachment by their internal format, which draws the viewer into a separate warp of time and space. As one moves from the edge of one wall to the point where it joins the other, one experiences a descending movement in space and a circular movement in time, for the 57,939 soldiers' names appear in the chronological order of the dates of their deaths, such that the war's first and last fatalities are joined at the walls' conjunction.

The commission's preference for this design was unanimous. However, for every layman who approved that choice, another seemed to be enraged by it. Those who shared the designer's goals were inclined to believe she had achieved them. Maya Ying Lin declared that her design was not meant to convey a particular political message but to evoke "feelings, thoughts, and emotions" of a variant and private nature: "What people see or don't see is their own projection."<sup>9</sup> Jan Scruggs

<sup>9</sup> Peter Ehrenhaus's interpretation follows closely Maya Lin's intention. "The Vietnam Veterans Memorial," he writes, "willfully relinquishes the traditional role to speak as the official voice of the community, explaining the meaning of past events, reassuring us that these deaths had meaning, celebrating the virtue of sacrifice. . . . Rather than electing 'speech' through a traditional form of symbolic expression, it opts for silence. It . . . places both the burden and the freedom upon us to discover

concluded: "The Memorial says exactly what we wanted to say about Vietnam—absolutely nothing." Indeed, on the original design the word, Vietnam, did not even appear (a statement indicating that the names on the wall belong to dead soldiers, and identifying the war in which they fought, was added later). This minimalist response to the commemorative task impressed one of the jurors as being "reverential"; another called it "a simple solution for a confused age"; a third saw "no escape from its power." Ellsworth Bunker, former ambassador to South Vietnam, found it to be "a distinguished and fitting mark of respect." Likewise, the *New York Times* applauded the design's "extreme dignity and restraint." It "seems to capture all the feelings of ambiguity and anguish that the Vietnam War evoked [and] conveys the only point about the war on which people may agree: that those who died should be remembered" (Hess 1983, p. 1235; Scruggs and Swerdlow 1985, pp. 63, 68, 69, 97; *New York Times*, May 18, 1981).

It is difficult to tell whether Maya Lin's supporters admired her design because it was an appropriately novel war memorial or because it was not a war memorial at all. The detractors, on the other hand, made frequent comparison between Lin's design and traditional war monuments, highlighting the confrontation between two commemorative styles—a heroic style traditionally associated with noble causes fought for and won, and what could be called an aheroic style, newly conceived for the tasteful recognition of those who had died for a useless and less-than-noble cause. Most veterans, however, did see something noble, if not useful, in the Vietnam War, and for them the Commission of Fine Arts had gone too far. One veteran, a member of the Memorial fund, described the design chosen by the commission as "the most insulting and demeaning memorial to our experience that was possible . . . a degrading ditch." As to its color: "Black is the universal color of shame, sorrow and degradation in all races, all societies worldwide." For another dissenting fund member, the sinking of the monument into the earth was an admission that the United States committed crimes in Vietnam. (Here are enlargements of the criminality theme that marked congressional discussions about the veterans.) The wall was also condemned as "an open urinal," "a wailing wall for anti-draft demonstrators," "a tribute to Jane Fonda," and a "perverse prank" that would baffle the general public. Another critic, who happened to be the Memorial's biggest financial backer, called the art commission's choice a "slap in the face," a "tombstone," "something for New York intellectuals," a kind

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what these past events mean, whether these deaths do have meaning, what virtue is to be found in sacrifice, and what our own relationship should be to our political institutions" (1988, p. 55).



of 21st-century art that few would appreciate. To make matters worse, the proposed order of names for the wall presents "a random scattering" that can only confound loved ones. Other critics, including the editors of *National Review*, complained about the names themselves. Since the memorial focuses on individuals, not the war, "it makes death in war a private matter rather than a sacrifice for a collective cause"<sup>10</sup> (Hess 1983, pp. 122–25; Scruggs and Swerdlow 1985, pp. 68, 71, 82–83).

Opposition to the memorial wall was expressed by attacks on details like color, shape, and location, but underlying all specific objections was a disdain for the style itself. Many believed that that style violated the limits of the war-memorial genre. Designed to be apolitical, this memorial struck critics as nonpatriotic and nonheroic. It conveyed a conception of the war and a conception of the soldier that ran counter to those of many Americans. These Americans, responded Jan Scruggs, "wanted the Memorial to make Vietnam what it had never been in reality: a good, clean, glorious war seen as necessary and supported by the united country." One leading opponent of the design conceded that the nation had not looked back favorably on the Vietnam War; however, he believed that "history can be re-evaluated" and "a piece of art remains, as a testimony to a particular moment in history, and we are under a solemn obligation to get that moment down as correctly as possible" (quoted in Scruggs and Swerdlow 1985, p. 94).

Most critics believed that only a "real" memorial could correctly represent the Vietnam War, but since that was politically impossible, they sought an addition to the present design in order to offset the "national humiliation" it perpetuated. At length, a compromise was conceived. An American flag, and next to that, a realistic statue of three soldiers, identifiable as white, black, and Hispanic, portrayed returning from patrol and gazing toward the names on the wall, would bring the original design closer to the traditional genre—would make it look more like a real war memorial.

Although their reasons may have differed, over 90% of the Vietnam veterans and 75% of the nonveterans surveyed after attending the Memorial's dedication ceremony<sup>11</sup> were in favor of including the flag as an

<sup>10</sup> For a sympathetic account of the Memorial as an antiwar symbol, see Foss (1986).

<sup>11</sup> This mail survey included 888 people, including 530 Vietnam veterans, 96 veterans' family members, 89 Vietnam-era veterans, and 140 nonveterans. Although the author reports that the number of respondents is "far more than is required for statistical validity," he is silent as to the actual number of nonrespondents. This author was motivated to conduct the survey because he believed strongly in the need to add a flag and statue to the Memorial site; however, he declares that every part of the inquiry, from question wording to analysis, was conducted properly, and with the supervision of a "prominent expert in survey research" (U.S. House of Representatives 1982, pp. E5108–9).

integral part of the Memorial site. At least 85% of every group surveyed (Vietnam veterans, Vietnam veterans' families, Vietnam-era veterans, other veterans, and nonveterans) approved of placing both a flag and statue somewhere on the Memorial grounds. And a majority in every group, ranging from 85% of the Vietnam veterans to 56% of the nonveterans, wanted the Memorial to include an inscription of the purpose for which the war was fought. It was the Vietnam veterans who felt most strongly about these changes, if strength of feeling can be gauged from reactions to the design of the wall by itself. Only a third of the veterans, compared with three-quarters of the nonveterans, reported a favorable impression of this design. The addition of the flag and the statue, the veterans claimed, would express a belief they could not find represented in the wall alone: that there is a nobility inherent in serving and dying for one's country. Combat, death, the nation—these are the concepts that many people wanted to see emphasized together (U.S. House of Representatives 1982, pp. 5107–8).

These openly nationalistic ideas met strong resistance in the Commission of Fine Arts, but Interior Secretary James Watt, moved by widespread support elsewhere, demanded their acceptance as a condition of his approving the Memorial site. And so by mid-1983, the flag was set in place. On Veterans Day 1984, two years after the Memorial's dedication, the statue was unveiled.

With this new configuration, the conservative president and his administration seemed to have warmed up to the Memorial. Echoes of the 1960s antiwar protests from the reading of the names of the war dead may have induced President Reagan to send an obscure official to represent the government at the 1982 unveiling of the Memorial wall. At the 1984 unveiling of the statue, the president himself officiated. A few days later, the Army decided that it would be proper after all to add the meager remains of an American killed in Vietnam to the Tomb of the Unknown Soldier. The Vietnam war dead were thus sanctified and incorporated into the nation's military heritage and their cause correspondingly elevated. The unpopularity and the outcome of the Vietnam War, however, imposed a limit to how far its commemoration could evolve in this traditional direction.

#### FLAGS AND EFFIGIES IN THE MARKING OF A LOST WAR

The combination of flag, statue, and name-filled wall reflected profound disagreement as to how the Vietnam War should be remembered and conveyed this disagreement by an apparent binary opposition. The wall was believed to elevate the participant and ignore the cause; the flag and statue were believed to elevate the nation and its causes above the

participant. However, the qualities and the relationship between these two patterns of meaning turned out to be more complex than anyone anticipated.

Public discourse about the addition of the flag and statue reveal deep anxieties evoked by the Memorial's original conception. Primary among these was the anxiety about masculinity and its representation. Tradition links masculinity with heroism and strength, but this linkage is weakened by defeat in war. Such concern was rarely if ever openly discussed, but it showed up in the identities of the artists, the artists' attitudes toward the war and their respective contributions to the Memorial, and in their supporters' and critics' own understanding of the war and its soldiers.

Maya Ying Lin was a young, Yale University student when her design was chosen as the winner of the Memorial competition. Lin was an articulate spokesperson for her design and was able to reflect on the way it embodied her intentions (which necessarily coincided with those of the Commission of Fine Arts). When asked, in an interview for *Art in America*, whether she thought the Memorial had a female sensibility, she responded: "In a world of phallic memorials that rise upward it certainly does. I didn't set out to conquer the earth, or overpower it the way Western man usually does. I don't think I've made a passive piece, but neither is it a memorial to the idea of war" (Hess 1983, p. 121). Lin distinguishes her design from the "masculine" memorials by referring to its horizontal positioning and its refusal to dominate the landscape. She does not, however, associate such a design with passivity or weakness. She is articulating an alternative notion of strength. But, intentional fallacy caveats aside for the moment, is this indeed an adequate symbol for the commemoration of anything having to do with war? Is not war, after all, always and everywhere, about the kind of masculine strength associated with conquest and domination?

Referring to the sense of responsibility soldiers have for each other during war, John Wheeler, one of the Vietnam Veterans Memorial project's organizers, and a veteran himself, wrote: "I consider my commitment as a statement that there are things worth dying for. It is a masculine statement. This is why war has tended to be viewed as a masculine enterprise" (1984, p. 140). Clearly the question of masculinity and its meaning was in the air, and the peculiar nature of the Vietnam War made it all the more confusing. The very raising of this question had broad implications for the resolution of the Vietnam Veterans Memorial's genre problem.

A strictly semiotic reading of the wall would highlight its "femininity." It is an opening in nature. It is womblike in its embrace of the visitor. The wall also reflects the visitor in its stone, thus eliciting a form of empathy, a trait traditionally considered more available to women than

to men. What, then, remains of war, an archetypically masculine endeavor, in this Memorial? If critics of the Memorial's initial design were occupied by this question, they did not ask it directly. The unconscious strategy was to deflect and displace. Rather than make an issue of the threat to masculinity by feminine forms, the problem was linked to the Memorial's blackness, its placement within rather than upon the earth, its suggestion of weakness and shame rather than pride and strength.<sup>12</sup> Accordingly, Maya Lin's critics made a list of demands that would draw out the Memorial from the inferior realm of darkness and earth into the superior realm of light and sky. They wanted the black granite changed to white; they wanted the walls moved above ground; they wanted a flag. National honor would thus be restored. The masculine (or "phallic," as Maya Lin would put it) would also be asserted and, in the flag, find its patriotic representation.

In addition, a decision was made to "erect" a statue that would serve as a counterpoint to the "establishment" of the wall. Here, Congress had turned away from its own unconscious assertion of masculinity by revising the wording of the Congressional Joint Resolution authorizing the Vietnam Veterans Memorial Fund. The resolution was passed with the original phrase "erect a memorial" changed to read "establish a memorial" (U.S. Senate 1980, p. 9433). However, once the new decision to erect a statue was made, and the sculptor Frederick Hart chosen to implement it, the masculine purview in matters of representing the veterans was overtly acknowledged. The sculptor himself certainly saw it this way. Drawing an explicit comparison between himself and Maya Lin, Hart claimed a special understanding of the veterans: he had studied them for three years. In this connection, he put one of our society's masculine traditions to the service of his craft: "I became close friends with many vets, drank with them in bars." While this experience converts directly into artistic privilege, "Lin's piece is a serene exercise in contemporary art done in a vacuum with no knowledge of the subject" (Heß 1983, p. 124). But how could a young, university-sheltered woman, or any woman, know this subject? In *Time's* assessment of the statue, we are told that the three soldiers "suggest the wordless fellowship that is forged only in combat." In our society, as Wheeler claimed, only men can comprehend that wordless "fellowship."

Even if we grant this claim, the anxious response of the Memorial's critics had, as noted above, another source: the fact of defeat. Since few things threaten traditional concepts of manhood more than defeat in

<sup>12</sup> These features of the Memorial might be viewed by at least one symbolic anthropologist as implying its autochthonous (feminine) as opposed to cultural (masculine) origins (Ortner 1974; see also Jeffords 1988).

battle, the symbolic burden must be very great indeed on any memorial that seeks to elevate the losing protagonists. As one military officer put it, "Why build a memorial to losers?" (*National Geographic*, May 1985, p. 558). If both the losers and the loss were ignored and the emphasis placed on the transcendent values of the cause, then perhaps no one's masculinity would be threatened. But since the military defeat could not be ignored, the flag and statue can be read as palliatives to doubts about the toughness of America's fighting men. Perhaps this is why the statue was so important to Maya Lin's critics: it drew attention away from the individual men who fought and lost in Vietnam and shifted that attention onto generic, that is, timeless, heroic soldiers. A neat idea, but it was not a convincing one. Its originators did not even convince themselves.

Let us take a closer look at the statue of the three soldiers. It is of a greenish-golden hue. The soldiers, seemingly disoriented, and garbed in finely wrought but distressed uniforms, gaze at the wall. Weapons hang uselessly from two of the soldiers' lowered arms and rest across the other soldier's back. Here, then, is the realism that critics of the wall's abstraction desired. Here is life—as opposed to the wall's expression of death—but it is life exhausted and confused. These men are of the war, but not at the moment in it. And since the soldiers are placed on only a modest pedestal, visitors cannot even figuratively look up to them; instead, they confront the soldiers almost at eye level. The mien of this statue is not heroic.

Considering the memorial complex as a whole, we find an even broader pattern of assertion and qualification. The wall embodied a controversial assertion: that individuals should be remembered and their cause ignored; the qualifications came with the flag and statue. These, in turn, were beset by their own internal tensions. The statue was conceived as a reactive assertion of pride, heroism, and masculinity, but, through the particular form it took, it emerged as a tempering of all these things. The flag seems to be unconditionally assertive because it is the only part of the memorial site that draws our eyes upward, but we notice in the peculiar dedication inscribed on its base a kind of backing off: "This flag affirms the principles of freedom for which [the Vietnam veterans] fought and their pride in having served under difficult circumstances." The euphemism is transparent enough. By "difficult circumstances" we are to understand not the power of our enemy but the feebleness of our cause. In this light, the similarities among the three parts of the Memorial become more salient than their differences, despite the realism of the statue's figures and the vertical prominence of the flag. Whether we look down, across, or up, we find ambivalence about the meaning of this war and its protagonists refracted throughout.

While the addition of the flag and statue made the Vietnam Memorial

look more like a traditional war monument, it also amplified the tensions and ambivalence that induced the original departure from a traditional war monument design. The vehicle for that departure, the wall of names, admits of its own internal qualifications, but these are more subtle than the ones built into the Memorial's two other parts and are perhaps more important as clues to its sociological significance.

#### THE POLITICAL SIGNIFICANCE OF NAMES

After reflecting on the criteria for the memorial competition, Maya Lin expressed her personal agreement with what they were meant to accomplish. "Many earlier memorials," she said, "were propagandized statements about the victory, the issues, the politics, and not about the people who served and died. I felt a memorial should be honest about the reality of war and be for the people who gave their lives" (*National Geographic*, May 1985, p. 557). Such a memorial, Lin also agreed, must contain the name of every soldier who died.

The partial list of war dead is a familiar memorial device, typically found on plaques in schools, churches, city halls, and town squares to mark local sacrifices made on behalf of national causes. Such a list is also found on larger memorial complexes, like the wall of the missing at the national cemeteries in Honolulu and Manila. Lin's conception is different. She presents a national list, a complete inventory of war dead, but she does not make it part of a recognizable monument. She presents nothing but a list, without even a label to identify its contents. She thus defines the war memorial genre as broadly as it has ever been defined before.

To list the names of every fallen soldier, with no symbolic reference to the cause or country for which they died, immediately highlights the individual. But, once it has been determined that the individual will overshadow cause and country, the task of constructing that individual becomes the primary concern. Precisely what, and how much, is to be said? Since Maya Lin's response to the question is to take the naming criterion and make it her dominant motif, there is no identifying of rank, nor any other individualizing markers, such as membership in a specific military service (army, navy, etc.) or place of civilian residence. With the individual's uniqueness thus dissolved into a homogenizing sequence of death dates, how can one claim that the names on the wall personify anything that American society values?

The Memorial's failure to dignify the names of the war dead was lamented by many. The *National Review*, for example, compared the names engraved on the unembellished Memorial wall to a list of traffic accidents (September 18, 1981, p. 1064). The magazine *USA Today*

(March 1983, p. 70) observed that "nowhere on the memorial was there to be any reference to where or why these people died, and no flag or patriotic symbol of any kind would indicate that honor or dedication to duty were involved in their deaths."<sup>13</sup> More frequently, however, the Memorial's naming scheme was regarded as a singularly American tribute to such values as pluralism, egalitarianism, and respect for the individual. In other words, the very fact that Americans can honor a name, regardless of rank and, one might hazard to say, regardless of mission, reveals the respect that American society gives to the individual.

But here, too, an alternative meaning can be discerned. A *Newsweek* article (reprinted in *Reader's Digest*) illustrated this meaning in its coverage of the National Cathedral candlelight vigil. The article begins with an attempt to find colorful distinctions in an otherwise undifferentiated and tedious inventory of names. However, the particularizing makes use of only one vehicle—ethnic diversity:

Names. Jose K. Brown, Sai G. Gew, Glenn F. Cashdollar, Kenyu Shimabukuru, Famous L. Lane, Witold J. Leszczynski, Thomas L. LittleSun, Salvatore J. Piscitello, Max Lieberman, Savas Escamilla Trevino, Billy Joe Lawrence. For 56 hours they read the names in the gothic confines of the National Cathedral. Rhythmic Spanish names. Tongue-twisting Polish names, guttural German, exotic African, homely Anglo-Saxon names. Chinese, Polynesian, Indian, and Russian names. They are names which reach deep into the heart of America, each testimony to a family's decision, sometime in the past, to wrench itself from home and culture to test our country's promise of new opportunities and a better life. [*Newsweek*, November 22, 1982, p. 82]

This passage depicts America as a melting pot, but it is a melting pot whose contents show some of the stereotyped features commonly ascribed to different nationalities. The southern Europeans have rhythm, Africans are exotic. Such stereotyping further undermines the celebration of diversity by implicitly reasserting the salience of class. The names sampled by *Newsweek's* author represent most of this country's economically and politically disadvantaged groups. Even the Anglo-Saxon names are designated "homely," and remind us more of Appalachia than of Main Street.<sup>14</sup> Thus, the article's celebration of America's ethnic pluralism is muted at a deeper level through caricatured references to the working-

<sup>13</sup> More recently, Terrance Fox saw this anonymity as a triumph of the "new collectivism" (1989, pp. 211–20).

<sup>14</sup> See, e.g., Bobbie Ann Mason's novel, *In Country*: "It was country boys. When you get to that memorial, you look at the names. You'll see all those country boy names, I bet you anything. Bobby Gene and Freddie Ray and Jimmy Bob Calhoun. I knew a boy named Jimmy Bob Calhoun that got killed over there. You look at those names and tell me if they're not mostly country boy names. Boys who didn't know their ass from their elbow" (1985, pp. 235–36).

class men who fought the war. The familiar class relations of wealth and poverty, power and powerlessness, are thereby reaffirmed—not only in *Newsweek* and *Reader's Digest* but also on the wall of the Memorial itself.

Note, too, how the designer of that wall, Maya Ying Lin, is named in the media. If, as the stereotype goes, all Asians look alike, how much more must their names sound alike. Thus five prestigious publications misspell Lin's name in four different ways: Maya Yin Lin (*Time*, November 9, 1981); Maya Ling Lin (*Washington Post*, November 12, 1984); Maya Yang Lin (*National Review*, December 11, 1981, and *New Republic*, December 1982); Maya Ling Yin (*U.S. News and World Report*, November 22, 1982). Carelessness in the public rendering of Lin's name undermines still further the respect for diversity that the monument is supposed to affirm.<sup>15</sup>

Whatever the media's attitude toward the Memorial's designer, their references to the American soldier's ethnicity, along with doubts expressed elsewhere about his powers as a fighter and about the cause for which he fought, all contribute to the undermining of widespread desires for a heroic monument to the Vietnam War. However, these negative themes hardly exhaust what was said about the Memorial and its men, much less what was felt about them. These residual statements and, most notably, these feelings transformed the Memorial wall into a more glorious war monument than the critics could have imagined—a monument that made even the most traditional versions of this commemorative genre, with their unqualified affirmation of heroism and patriotism, seem inadequate.

#### USES OF GENRE: THE ENSHRINEMENT PROCESS

The meaning of the Vietnam Veterans Memorial is defined by the way people behave in reference to it. Some monuments are rarely talked about or visited and never put to ceremonial use. Other monuments, like the Tomb of the Unknown Soldier, are used often as formal ceremonial sites and visited year after year by large numbers of people. Between the Vietnam Veterans Memorial and its visitors, a very different relationship obtains. Not only is the Memorial an object of frequent ceremony and frequent visitation (more than 2.5 million visitors and 1,100–1,500 reunions per year),<sup>16</sup> it is also an object with which visitors enter into active

<sup>15</sup> The embarrassment is compounded by the Pentagon official who referred to Maya Lin's Chinese descent in his criticism of her memorial (Hess 1983, p. 121).

<sup>16</sup> Personal communication from Duery Felton, Jr., curator, Vietnam Veterans Memorial Collection Museum and Archeological Regional Storage Facility, National Park Service.



and affective relationships. These relationships have thwarted all original intentions as to what the Memorial should be and represent.

Conceived as something to be passively looked at and contemplated, the Vietnam Memorial has become an object of emotion. This is not the case for the Memorial site as a whole, just the wall and its names. The names on the wall are touched, their letters traced by the moving finger. The names are caressed. The names are reproduced on paper by pencil rubbing and taken home. And something is left from home itself—a material object bearing special significance to the deceased or a written statement by the visitor or mourner.

The dedications of the aggrieved are a spectacle that to many is more moving than the Memorial wall itself. More goes into spectators' reactions, however, than morbid curiosity, for the scenes of mourning are not altogether private affairs. These scenes make palpable a collective loss known to all. Not only, therefore, do friends and family bring their personal grief to the Memorial wall, but society exercises a moral pressure over those not directly affected by loss to add their presence to the situation and to align their sentiments with it.

This moral pressure produces the large gatherings from which much of the Memorial's dramatic impact derives. By contrast, when the Memorial's grounds are deserted, its wall appears less magnetic, less moving, less memorable. Durkheim was referring to such a contrast when he declared that the experience of being in a sacred shrine "is only the sentiment inspired by the *group* in its members, but projected out of the consciousnesses that experience them, and objectified. To be objectified they are fixed upon some object which thus becomes sacred. . . . Therefore the sacred character assumed by an object is not implied in the intrinsic properties of this latter: it is added to them" (1965, p. 261). Just so, the Veterans Memorial is properly designated a sacred shrine because it is the object of solemn assemblies in which moral sentiments arise and reinforce one another.

Since assembly and arousal cannot in themselves account for the Memorial's sacred character, we must not follow Durkheim too closely. Durkheim believed that the sacredness of an object like the Memorial wall obtains exclusively from the way people react to it. Yet, the wall is more than just a convenient screen on which the Memorial's visitors project their sentiments. The wall itself is an evoker of these sentiments. If this were not the case, if any object would do to embody collective feeling, as Durkheim believed, then we would be hard pressed to understand why other parts of the Memorial—the flag and the statue—do not evoke the same reactions as does the wall. Material tokens are placed much less frequently at the flag and statue than at the wall; expressions of strong emotion occur almost exclusively at the wall; the demeanor of

visitors is more solemn, by far, in the vicinity of the wall; the traveling or portable shrine consists of the wall alone. It is the design of the wall—specifically, its list of names—that induces these reactions. The names are the objects of a ritual relation that no other part of the Memorial site can sustain. Withal, the ideals and memory of the cause, lacking comparable symbolic and social supports, fade into the background.

However, there is another side to this relationship, one that highlights a different aspect of the tension between national causes and their participants. To the original dilemma of how to honor the participant without reference to the cause, there is a corresponding reciprocal problem of how to ignore the cause without denying the participant. That problem did not occur to the art commissioners who wanted to protect the wall's artistic (ideological?) serenity from "corny patriotic claptrap" (U.S. House of Representatives 1982, p. E5108). But what kind of protection could they give? The corniness arose not from the addition of a flag and statue but from the way visitors conducted themselves in the vicinity of the wall. The impulses and sentiments motivating this conduct, however, were varied and complicated.

#### USES OF GENRE: THE REPRESENTATION OF AMBIVALENCE

All nonperishable articles left at the Vietnam Veterans Memorial are collected each day and kept at the Museum and Archeological Regional Storage Facility. Row after row of airtight shelters preserve these "gifts" for the future, thus extending the Memorial in space and in time. This part of the Veterans Memorial complex is the most populist, for its contents, in accordance with Interior Department policy, are determined by the people who visit the Memorial and not by professional curators. It is difficult to tell whether or not the idea for such a museum was part of the Interior Department's struggle against the elitism of the Commission of Fine Arts. That the museum collection negates the complaints of the Memorial's early detractors as well as the praise of its early defenders is more certain. An assessment of the objects themselves shows this to be so.

The most colorful objects left by visitors are flowers, taped to the wall or placed on the ground beneath a loved one's name. Nothing of a political nature is embodied in these floral displays; however, the Park Service's inventory of other (nonperishable) items does convey a coherent political message. This inventory shows that the one object most frequently left by the wall is a small American flag attached to a stick and set in the ground below the name that the visitor desired to mark. Through this offering, visitors uttered a political statement that was not supposed to be made. They asserted their patriotism, their loyalty to a

nation. Whether they got the idea themselves or copied it from one another, they could think of no better way to dignify their loved one's memory than to associate his name with his country's emblem.

These assertions are amplified by other objects. The largest category of objects, almost a third of everything that has been deposited by the visitors, consists of military items, mostly patches and insignias marking military-unit membership, as well as parts of uniforms, dog tags, identification bracelets, medals, awards, and certificates. The memorial site was thus decorated by symbols of the roles through which living veterans once enacted their commitment to the nation. These symbols began to appear in great profusion as soon as the Memorial was dedicated and continued to appear two years later when the statue of the three soldiers was unveiled. Designed to draw attention to the individual and away from the nation and its cause, the Memorial's wall turns out to be a most dramatic locus of patriotic feeling. The wall's use moved it toward that traditional war monument genre that opponents and supporters alike once believed it deviated from.

When profusely decorated with patriotic emblems, the wall alone may enhance our idea of the traditional war monument, but it cannot embody that idea. This is because patriotism is not the only response that the wall excites. The Memorial wall has in fact become a kind of debating forum—a repository of diverse opinions about the very war that occasioned its construction. Traditional war monuments serve no such reflexive function.

From its very inception, the Memorial's sponsors insisted that it would make no statement about the war—a promise predicated on the assumption that political silence could somehow be ensured by the Memorial's design. An ordinance that expressly prohibits political demonstrations on Memorial grounds supplemented this assumption. Thus deprived of a traditional public forum, political opinions were, instead, inserted into many of the written statements brought to the wall. Letters, poems, and memos, often accompanied by photographs, can be viewed analytically as publicly accessible private sentiments or as privatized public opinion. Either way, they articulate the public's diverse visions of Vietnam. Not all these written statements included opinions about the war itself. Among the opinions that were expressed in the letters, however, more than half were ambivalent or negative. And the wall is the site where these opinions were displayed. One poem declares: "And in that time / When men decide and feel safe / To call the war insane / Take one moment to embrace / Those gentle heroes / You left behind." Another correspondent laments the soldiers who went "So far from home and the land of their own / To fight in a war the reason unknown." A more subtle critique is seen in a letter written by an American soldier fighting

in Vietnam in 1968: "Anyway, all the news is bad this time. I have 71 days to go now and if I make it I hope I never have to come back here again." Written on the letter is the location on the wall of that soldier's name. Finally, an obviously alienated correspondent exclaims: "Still don't know why? Think you guys may be better off."<sup>17</sup>

Some visitors to the Memorial admitted their inability to understand why Americans died in Vietnam, but they considered their ignorance a personal problem, not a sign that the war and its deaths lacked purpose: "God has His reason; / God has His plan— / The reasons are not available / To the Ordinary Man." Others were more successful in their search for the war's purpose and made their discovery explicit in letters. A 13-year-old girl declared: "I feel like I owe you men something because if it were not for you, I might not be living in a free country."

These letters and poems, no less than the other items brought to the wall, reveal that many people are unable to look back on the war in a politically neutral way.<sup>18</sup> Notwithstanding the claims of its official sponsors, the Vietnam Veterans Memorial elicits the same tensions as those that divided the nation during the war itself. As time passes, this capacity to evoke affirmative and critical sentiments endures. The volume of objects deposited at the Memorial is as great or greater today as when the Memorial was dedicated, and the range, if not the exact proportion of the different objects, is the same. Flags, although no longer stored and inventoried, continue to appear in profusion. Military objects are still deposited by Vietnam veterans, and these are supplemented by military objects deposited by post-Vietnam soldiers. Personal items and letters, too, appear as frequently as ever. And many of the recent letters bear criticism of American policy in different parts of the world, particularly Central America, comparing it to the policy that led to war in Vietnam.<sup>19</sup>

In the Veterans Memorial, then, we see none of the hegemonic influence that forms the basis for Gusfield and Michalowicz's "manipulative theories" of secular symbolism (1984, pp. 424–27). If the Memorial were

<sup>17</sup>This last sentiment reflects the sense of liminality felt by many veterans: they were home from Vietnam, but not "at home." Living an apparently endless, internal Vietnam War, those veterans had strong responses to the Memorial's welcoming message. Maya Lin had stated that she wanted the wall, with its seemingly interminable list of names, to read "like an epic Greek poem" (*National Geographic* 1985, p. 511). Although it was probably the list-drenched war poem, the *Iliad*, that she had in mind, the veterans were transforming the *Iliad* into the *Odyssey*—the story of a man struggling to come home. Throughout the many Veterans Day activities accompanying the Memorial's dedication, the expression "welcome home" was repeated. In fact, "Homecoming" was the official theme of the day.

<sup>18</sup> For analysis of these letters, see Palmer (1987) and Carlson and Hocking (1988).

<sup>19</sup> Personal communication, Duery Felton, Jr.

in fact a tool of state power, if it were adopted by the state in order to maintain allegiance to an elite and to promote authoritative ways of seeing society (as Haines [1986] suggests), then that tool has not been used very effectively.

#### CONTEXTS, CONSTITUENCIES, AND MEANING

Effective commemorative tools check ambivalence. The ambivalence attending the Vietnam War, as we have seen, is not suppressed but summarized by the several parts of the Vietnam Memorial's physical makeup. This ambivalence is not necessarily something the individual feels. It is a social fact, an outcome of the incompatible commemorative viewpoints that were held and the measures that were taken by different constituencies. The Memorial is thus a ritual symbol that expresses the contradictions of society.

The Memorial's contradictions not only betray the state's inability to effect a uniform interpretation of the past; they also affirm the nation as a reality whose salience transcends the state. These affirmations are most apparent to those who regard the Memorial naively, who possess no knowledge of the issues that attended its creation.<sup>20</sup> Our reading of the letters suggests that the people who came to see the names of their loved ones and comrades on the Memorial's wall pay no attention to its color or placement or to its vertical or horizontal lines. Approaching it from the front, they only see the Lincoln Memorial looming before them, and behind, the Washington Monument. Although Maya Lin deliberately aligned these shrines to the Memorial's wall, she and her admirers hardly mentioned, let alone discussed, them in their efforts to defend her original design. For this reason, and because walls that point nowhere make for aesthetic awkwardness, our impression that this alignment was effected for artistic rather than ideological purposes may be justified. However, it is also our impression that for two years following the Memorial's dedication, the Lincoln and Washington monuments (enveloped by the national atmosphere of the Mall [Griswold 1986]) were functional surrogates for the statue and flag, and in later years were supplements to them, eliciting a moral awareness that a memorial wall alone might have been incapable of inspiring. It is, in fact, the capacity to evoke the surpassing presence of the nation itself (a capacity that the Commission of Fine Arts wanted to see the Vietnam Memorial deprived of) that defines the ultimate, nonnegotiable aspect of the war monument genre. Divested of this national presence, as it would be if placed permanently outside

<sup>20</sup> See Ehrenhaus (1989, p. 96) on the distinction between "authentic" and "unauthentic" responses to the Veterans Memorial.

its existing monumental surroundings, the Memorial wall would be experienced differently. It would remain a solemn and affecting monument (as is the wall's portable replica), but against a background of high rises or rolling meadows, against symbols of locality rather than the transcendent reality of the nation, it would become less stirring and magnetic, less sacred. Of this reality the Vietnam Memorial's flag and statue are merely external supports. In a more mundane setting, however, these would be more critical additions to the Memorial than they are in the nation's capital.

The intensive, emotional reaction to the Memorial has superimposed itself upon, but has never replaced other reactions. The Memorial as it is presently constituted by wall, flag, and statue remains a multifocal version of the war monument genre, a version ambiguous enough to accommodate a wide span of commemorative meanings. By interacting with it and interpreting it, different constituencies make this multivocal quality operative. For politicians, the Memorial helps to acquit the nation's overdue debt to its veterans; for artists, it represents a novel combination of symbols and forms; for the veterans, it is an emblem of their rightful place in the nation's political and moral heritage; for families of the dead, it is a shrine linking home and nation; for those who supported the war and defined it as honorable, it is a vindication; for those who opposed the war and defined it as dishonorable, also a vindication; and, for some tourists, the Memorial is merely a place to go.

Attended by all but interpreted in different ways, the Vietnam Veterans Memorial occasions solidarity in the absence of common beliefs. It induces people who think differently to display the same ritual respect toward the soldiers. While some scholars, notably Émile Durkheim (and followers, including David Kertzer [1988]), construe common action rather than common beliefs as the essence of solidarity, there remains a distinction to be drawn between monuments that induce uniform ritual respect without consensus in belief (like the Vietnam Memorial), and monuments that sustain both common belief and uniform ritual respect (like the Revolutionary War and the world war memorials). At stake in this distinction are two different conceptions of the past, two different ways of affectively responding to it, and two different ways of representing it. To consensual monuments goes the task of celebrating the past; to dissensual monuments goes the task of coming to terms with it, of integrating into the collective memory political divisions and military defeat.

Because it takes longer to come to terms with an unsuccessful effort than to rejoice over a successful one, the Veterans Memorial design remains partly open-ended. The most immediate possibility for further change in that design is the addition of a statue to honor women Vietnam

veterans—the nurses.<sup>21</sup> Explaining the motive for its effort, a spokeswoman for the Vietnam Woman's Memorial Project stated: "If you go to the Wall, and see the three fighting men, do you think of the women?" (*Atlanta Constitution*, May 3, 1986, p. A2). This spokeswoman is challenging the claim that the existing monument adequately represents all the Vietnam War's participants. However, difficult obstacles must be overcome before this challenge succeeds.

The first obstacle is the problem of reaching consensus on what a suitable women's memorial should look like. Consensus is so problematic that the jury for the recent (1990) design competition selected two winners—an abstract sculptural form with a water-misting device and a realistic statue of a nurse. The artists, in accordance with jury instructions, are presently working together on a compromise monument.<sup>22</sup> The most formidable obstacle, however, is the series of federal agencies that must approve this compromise. Their members will almost certainly disagree on what women accomplished in Vietnam. As Karal Ann Marling and John Wetenhall (1989) have observed, the ability to think specifically about the significance of women's role in the war has been hindered by the Defense Department, which "pronounced itself unable to arrive at a reasonable estimate of how many women actually went to Vietnam" (p. 348), by disagreements within society about the proper relations of women to war and war commemoration, and by the Commission of Fine Arts, which believes the Memorial's representativeness is broad enough and that any addition to the Veterans Memorial will only encourage more submissions and demands for its further modification.<sup>23</sup>

This resistance to the placement on the Memorial's site of a separate marker for women—especially the resistance of the Commission of Fine Arts—must be understood in the context of the emergence of new constituencies actively seeking individual recognition—a reflection perhaps of the peculiarities of our "postmodern" political life, wherein fragmentation of interest groups and recognition of cultural pluralism transform our notions of political enfranchisement and expression.<sup>24</sup> But the new

<sup>21</sup> One of the most recent Vietnam memorials to honor female veterans as well as male veterans was unveiled in Atlanta on Veterans Day, 1988 (*Atlanta Journal* [November 12, 1988], p. 1C). For a useful discussion of the problematic role of women in war memorials, see Inglis (1987).

<sup>22</sup> Communication from the Vietnam Women's Memorial Project.

<sup>23</sup> The discouraged admirers of Vietnam's sentry dogs, e.g., are looking elsewhere for their memorial site, but their first preference was a place near the Vietnam Veterans Memorial (*Chicago Tribune* [August 2, 1988], p. C5).

<sup>24</sup> This postmodern concept of politics is reproduced in the postmodern quality of the Memorial's present design. The realism of its statue stands as a pastiche-like supplement to the abstractness of its wall. Tradition is thus appended to avant garde.

constituencies may also participate in the unfinished nature of the Vietnam War itself, raising the question, Are defeats always "unfinished"? Victories, after all, are to be celebrated; defeats are to be explained, and every explanation, being inherently contestable, is an invitation to continuing debate. This sense of the war's incompleteness is reproduced, but not resolved, in the incompleteness of the Memorial. Each addition to the Memorial can be read as an attempt at bringing us closer to reconciling ourselves to the war and its participants. However, the reconciliation process diverges along two different paths. One path—the addition of flag and statue—aims at legitimating the cause (perhaps belying our desire to rewrite the story of Vietnam by turning defeat into victory).<sup>25</sup> The other path concerns the participants, with each addition (starting with the women veterans) opening the door to new constituencies demanding special recognition. In both cases, complete reconciliation remains elusive. But if we are right about the Memorial's articulating rather than concealing the nation's ambivalence toward the war, then the Memorial's open-endedness may actually be one of the features that contributes to its salience.

## DISCUSSION

This study of the Vietnam Veterans Memorial highlights the broad range of variation presently possible within the war monument genre. Unlike the kinds of monuments that mark popular wars, the Vietnam Memorial underwent frequent changes that both affirmed and modified the traditional conception of the war monument. Starting as a modest plaque, it became a politically sanitized wall sculpture, then a more differentiated memorial that included a flag and a realistic statue. These changes resulted from a political process involving competing claims on how the Vietnam War should be remembered. The process was itself a reflection of contradictory assessments of the war in American society as a whole.

During the 1970s and early 1980s, Walter Dean Burnham (1982) observed a fundamental shift in America's values and self-conception—a "reactionary revitalization movement," as he called it. However, if this new political climate was conservative, it did not reverse the collective verdict on the Vietnam War. In the fall of 1980, for example, 81% and 86% of veterans and adult nonveterans, respectively, believed that America's soldiers had become "part of a war that went bad." Of all adults sampled nationwide in March 1982, 50% believed that the United States never tried to win this war. Three years later, only one-third of a compa-

<sup>25</sup> For discussion of the Vietnam War's reconstitution in film and politics, see Gibson (1989) and McKeever (1989).



rable sample believed that the United States should have tried to win, while more than half, 54%, believed it should not have even sent troops. The American public was very uncertain about the war's purpose. Fifty-seven percent failed to see a clear purpose, and a plurality (45%) of the respondents believed that most of the South Vietnamese people did not care which side won the war. By a two-to-one margin, Americans in the mid-1980s believed that the United States should have left Vietnam earlier than it did (Harris 1980; *Washington Post* 1982, 1985*a*, 1985*b*; *Los Angeles Times* 1985. For detail, see MacPherson [1984]).

That the attitudes expressed in the mid-1980s are essentially similar to those prevailing during the early 1980s, when plans to commemorate the Vietnam veterans were realized, is a safe assumption. The impetus for building a monument to these men and the warmth with which that monument was received by the people could not have resulted from a new, positive consensus on the war. This case thus suggests an alternative to Durkheim's focus on moral unity as the ultimate object of commemoration. Durkheim believed that people engage in commemoration in order to remain faithful to the past, but he was not thinking about any part of the past, only that which is appealing and heroic. When people remember in this way, he said (1965, p. 420), their belief in the goodness of their society becomes stronger: "The glorious souvenirs which are made to live again before their eyes, and with which they feel that they have a kinship, give them a feeling of strength and confidence: a man is surer of his faith when he sees to how distant a past it goes back and what great things it has inspired." When a nation or community is in full agreement about the virtue of some previous cause or collective achievement, then heroic monuments do become plausible as objects of ritual and dedication. But when the value of a cause and its achievements is less certain, when its "souvenirs" are less than "glorious," then a different commemoration is conceived, one that induces more sober reflection than enthusiastic uplift, more recognition of losses than celebration of gains.<sup>26</sup>

Our analysis of this process has turned on the way genre enters into the act of commemoration. Although Griswold (1987*a*, p. 18) is undoubtedly right in her belief that genres admit of no "Aristotelian fixity," we have identified constraints on how far a genre can change before it is no longer itself, as well as how far it must change in order to commemorate its object credibly. A relatively fixed idea about what war monuments should look like and a realization that the Vietnam War was, at best, a

<sup>26</sup> For two studies that regard collective memory from a standpoint situated "beyond the pleasure principle," see Schwartz, Zerubavel, and Barnett (1986) and Schudson (1989, pp. 109–11). See also Schwartz (1982, pp. 392–94).

controversial one—these two conceptions pushed the Vietnam Veterans Memorial in two opposite directions. The traditional conception of war memorials, unopposed by any other consideration, would have led to the creation of a device that celebrated martial heroism in the service of a national cause. From this heroic ideal, no specific design can be inferred; however, those who opposed the first version of the Vietnam Memorial had a clear sense of what they wanted. They designated a cluster of features that all proper war memorials must, in some degree, display: a statement engraved on the monument describing the cause for which it was built, realism of human representation, vertical preeminence, lightness of color, grandness of size, and conspicuous national and military symbolism. No monument needs to incorporate all these features, or even a set combination of them, to qualify as a war memorial; however, at least some items from this cluster seem to be required, and some were indeed used to embellish Maya Lin's minimalist design. The addition of a marker identifying the Memorial wall as a monument to the Vietnam War dead and the addition of a national flag and a realistic statue pulled the initial design in the direction of the traditional war memorial genre.

However, none of these additions was unproblematically heroic; none represented an unproblematic cause. Each addition, as we have documented, contained its own internal qualifications, and these qualifications betray the appeal of the minimal memorial. Deliberately avoiding literal description and realistic representation, cast along modest, horizontal lines free of patriotic symbolism, the minimal war memorial expressly avoids the portrayal of war as a sacred undertaking. Thus, if the image of the traditional war memorial set into motion powerful forces to modify the original Vietnam Memorial design, the reality of the Vietnam War—an undeclared defeat about which the nation was divided—set into motion equally powerful forces to assure that this modification would not go too far.

These two imperatives, one contributing to the development of a traditional monument, the other, to a nontraditional one, worked themselves out in a social context that amplified their tension and their effects and intensified the genre problem. The favorable reception of the nontraditional monument was secured by a public opinion that had come to regard the war as a mistake. In contrast, the appeal of the traditionalized monument derived from a variety of other changes in the political atmosphere, particularly the great conservative awakening of the early 1980s, the growing appreciation of how much the veterans had sacrificed for their country, and the increasing reliance of all political actors on constituency-based interest group activity, which enabled them to exploit the most negotiable aspects of the commemorative genre problem. At

every point in the Vietnam Memorial's development, then, opportunities for change in commemorative form were accompanied by constraints on change. Out of this dynamic field emerged the Vietnam Memorial itself: heroic, but not exultant; acknowledging a cause, but not proclaiming it.

### Social Reproductions

The most successful cultural objects reproduce themselves. Their images reappear across the social and physical landscape, varying enough to permit local incarnations but always retaining some essential elements of the original. In the case of the Vietnam Veterans Memorial, this reproduction process has been swift and vigorous. A replica of the Memorial wall is currently traversing the country and is booked beyond 1992. It is an exact, half-scale copy of the original, made of aluminum panels coated with black enamel. The names are raised, in order that they may be touched and pencil rubbings made. The objects left at this "Moving Wall" are gathered up for storage and display at a Moving Wall Museum planned for Santa Fe, New Mexico. Like the original Vietnam Veterans Memorial, this wall also has its moral entrepreneur, a veteran named John Devitt who conceived his mission while visiting the original. Of that Memorial, Devitt (echoing Jan Scruggs) declared: "It's not a statement about war, it's a statement about sacrifice and service (*New York Times*, August 1989, p. 31). Both men, Scruggs and Devitt, evidently had the same idea: to elevate the participant but ignore his cause.

The vast popularity of both the Moving Wall and the Veterans Memorial in Washington suggests that the original design reflects tensions over the Vietnam War that are general in society rather than peculiar to a given set of artists, art critics, and political action groups. Such a general condition is also evidenced in the readiness with which different state and local authorities have brought the Veterans Memorial into their own efforts to commemorate the Vietnam War. Local monuments, like their Washington prototype, superimpose elements of the traditional war monument genre on a nontraditional, minimalist design. Variant combinations of these two forms appear in many cities, including Junction City, Kansas, whose memorial consists of a wall engraved with a list of names and a portrayal of part of the Frederick Hart statue; in Hartwell, Georgia, where two memorial walls—one bearing the names of the six local men who died; the other a variant of the Hart statue—are separated by a broken letter "V" designed to symbolize "broken dreams, promises, and plans." A similar pattern appears in the Springfield, Illinois, memorial, situated near Lincoln's Tomb and consisting of two intersecting walls forming a cross, engraved with names, military insignia, service anthems, and surmounted by flags and an eternal flame; in the Kansas

City Vietnam Veterans Memorial Fountain, combining a name-covered wall and a system of pools symbolizing different aspects of both the war and the people's reaction to it; in the New York City memorial, which replaces the name list with a display of written correspondence showing directly the support and opposition to the war expressed by soldiers before they died; in the Disabled American Veterans Vietnam National Memorial in Eagle's Nest, New Mexico, with its arrangement of names and photographs. Asserting the same principle—the priority of the participant over the cause—these different monuments stand as collective representations of the Vietnam War's significance.<sup>27</sup>

Yet, the salience of participant and cause, individual and national effort, is variable. In Springfield, emblems of national effort are most evident, in New York, least so. The establishment throughout the United States of minimalist memorial forms differentially qualified by elements of the traditional genre show that there are aspects of commemoration that are not shared, yet are still objects of collective representation.

If the Moving Wall and the local Vietnam monuments are seen as "first cousins" to the original Vietnam Veterans Memorial, then its "second cousin" must be the proposed Korean War Veterans Memorial. The affinity between the Vietnam and Korea shrines can be described in terms of two axes along which American wars vary, namely, their justification (weak vs. strong) and outcome (victory vs. defeat).<sup>28</sup> Many Americans judge the Vietnam War negatively on both counts.<sup>29</sup> The Korean War, judged as neither a victory nor a defeat, neither weak nor strong in

<sup>27</sup> Combining traditional and abstract elements, these memorials constitute a small but representative sample of many similar Vietnam War memorials that have been erected throughout the United States. (Personal communication from the late Margaret Donovan of Washington, D.C. At the time of her death, Ms. Donovan was undertaking research for *The Forgotten Warriors: A Directory of Korean and Vietnam War Memorials and Museums*. Inquiries about this partially completed project may be directed to the Vietnam Veterans Memorial Collection, Museum and Archaeological Regional Storage Facility, Lanham, Maryland 20706).

<sup>28</sup> American wars deemed just in motive and victorious in outcome include the Revolutionary War and the two world wars. Into this same category, most Northerners would place the Civil War. Generally regarded as victories but condemned by many contemporaries and succeeding generations as having been waged for dubious moral and political reasons are the War of 1812, the Mexican War, the Indian Wars, and the Spanish-American War. The single war that was nobly, but unsuccessfully, fought was the Civil War, as perceived by Southerners. To these different categories of war correspond different volumes and different qualities of commemoration (Mayo 1988).

<sup>29</sup> These judgments and their inhibiting effect on the creation of traditional commemorative devices are more vividly realized in post-World War II Germany than in post-Vietnam War America. Unlike America's, Germany's defeat was literally shattering; its cause regarded as not merely misguided (as many perceived America's to have been in Vietnam), but evil in conception and act; its memories borne in a silence deeper than America has ever known.

justification, resembles the Vietnam War in its lack of positive military or moral qualities. The two wars also share a relatively long gap between the time of their official termination and the time a major war memorial was planned for them in the nation's capital, an adjacent location on the capital mall, and a symbolic structure that is, in many respects, similar.

The Vietnam Veterans Memorial and the Korean War Veterans Memorial are different monuments, promoted by sponsors appealing to different constituencies; yet, they emerge out of the same ambivalent culture of commemoration. Reflecting the tension between realism and abstraction, expressiveness and restraint, each monument is a compromise between different views on how its war should be remembered and what a memorial to it should include. The Korean Memorial's structure, as originally conceived, incorporated traditional elements, including realistic images of soldiers, but these were tentatively rendered—they were “ghostly,” as one of the designers put it.<sup>30</sup> Rival designers modified this original model in two ways: (1) by making the soldiers lifelike and portraying them in a combat situation and (2) by proposing a less conspicuous memorial site. The monument-selection commission rejected the first modification but embraced the second, thus deciding against a traditional, heroic-size memorial to the Korean War. To be sure, the commission jury (made up of veterans of Korea) views the war's accomplishments more positively than the general public and it endorsed every one of the designers' traditional elements, including statues, flag, and identifying inscription.<sup>31</sup> The jury qualified its commemoration of the Korean War as an American war, however, by approving the listing of all 21 combatant nations, even though non-American foreign forces in Korea were token forces. Also, it approved an engraved numerical count of participants and casualties and agreed to name the monument for the veterans who fought the war rather than for the war itself. Thus, the elevation of the soldier and deemphasis of his cause are less dramatic in the Korean Memorial than in the Vietnam Memorial, but they are nevertheless apparent in its present design. When established on the mall, this design will, in turn, accentuate two of the Vietnam Memorial's taken-for-granted features: its honoring of men who died in a restrained “police action” rather than an officially declared war and its marking the high point, in lives lost, of the late 20th-century Cold War in Asia.

It is also our sense that the Vietnam Veterans Memorial's successful separation of participant and cause and its attendant elevation of the

<sup>30</sup> Personal communication from Donald A. Leon of Pennsylvania State University.

<sup>31</sup> Images of the Korean War participants, including women, will be engraved on the Memorial's walls (partly in anticipation of future demands for their inclusion). Personal Communication from Robert Hansen, Korean War Veterans Memorial Advisory Board.

participant, affected, in a way that was actually preemptive, the public sentiments and symbols of the Persian Gulf War. The profusion of yellow ribbons preceded the displays of U.S. flags and, in sheer number and points of display, predominated. The ribbons were precisely about the troops, individuals all, and were specifically focused on the troops' coming home. The U.S. flags, more directly linked to the nation and the cause, were often secondary and only proliferated toward the end of the war, that is, when the end was a sure and imminent thing.

#### THE PRODUCTION OF COMMEMORATIVE MEANING

We cannot anticipate the public's reaction to monuments that will be dedicated to the apparently prestigious Persian Gulf War. We can only affirm that the least prestigious war in American history, the war fought and remembered with the most controversy, is precisely the one whose monument is most revered and most often visited. This essential fact must be incorporated into any effort to theorize our understanding of the Vietnam Memorial. As we outlined it in our introduction, the development of a thick description of the Vietnam Memorial involved the disclosure of relevant social, political, and cultural processes. These processes were, in their substance, interactive: moral entrepreneurs interacting with their constituencies and with political and cultural authorities; politicians interacting with their colleagues and within a conservative social climate, veterans interacting with their memories and their current situations; artists interacting with politically forged competition guidelines, with denizens of the art world and with lay audiences; visitors interacting with the wall. The key to the Memorial's multifold meaning lies in this interaction web. The Memorial's ability to bring off commemoration of a dark and controversial part of the past comes to rest on the surrounding society's interaction with the Memorial itself. Whatever processes brought this cultural object into being in the first place, it is the use made of it that brings it into the life of the society. Wendy Griswold, in her outline of a model for analyzing cultural objects, notes that meaning is produced by the interaction between "the symbolic capacities of the object itself and the perceptual apparatus of those who experience the object" (1987*b*, p. 1079). We have come to understand the complex evolution of the Vietnam Veterans Memorial in the same way: as a succession of interacting producers, sponsors, and audiences.

Given our effort to discover the various meanings of the Vietnam Veterans Memorial, we have come to appreciate the distinctions that Victor Turner (1967, pp. 19–47) made in his own analysis of symbolic devices. Turner, in this connection, identified three levels of meaning. "Exegetical meaning" is expressed in what people say about a given symbol;

"positional meaning" is the relation of one symbol to others in a broader semiotic system; and "operational meaning" is expressed in the way the symbol is used. It is the last, the operational, meaning that most strikingly draws our attention at the end of this article. For, to a large extent, we read the Vietnam Veterans Memorial through its uses. Ironically, the memorial designed to be least visible has become the most visible because its users have opened up its spaces and extended them outward. They have done this by the depositing of items at the wall, by the creation of a vast facility for their storage and their display, by the addition to the original site of a flag and statue, by the devising of a Moving Wall, and by the establishment in cities across the land of Vietnam War Memorials that resemble the Washington prototype. In his paper on the Warsaw Ghetto Monument, James E. Young recalls Robert Musil's statement that "there is nothing in this world as invisible as a monument. They are no doubt erected to be seen—indeed, to attract attention. But at the same time they are impregnated with something that repels attention" (1989, p. 71). Perhaps the Vietnam Veterans Memorial's enduring visibility has something to do with its unfinished, constantly moving and expanding form. And perhaps the appeal of its commemoration without victory or consensus is also linked to its mutability—not necessarily in anyone's intention but in the tendency of the collective processes that created it.

That the Vietnam Memorial itself is deemed a sacred site and is an object of frequent ritual also conforms to our assumption that the paramount source of its meaning is operational. The rituals that take place there, however, are not the kind Durkheim would have understood. These are not rituals that strengthen common sentiments by bringing together those who hold them and putting them into closer and more active relations with one another (1965, p. 241). We are dealing with ritual assemblies that are intense even though, or perhaps because, the volume of common thoughts and sentiments about their object is so sparse. In studying the Vietnam Memorial, we have come to believe that people may need more ritual to face a painful and controversial part of the past than to deal with a painful part of the past about whose cause and meaning there is agreement. Rituals, however, do not resolve historical controversies; they only articulate them, making their memory public and dramatic. Unable to convince one another about what went wrong in Vietnam, therefore, the men and women who assemble at the Vietnam Memorial do so with more gravity than is displayed at shrines commemorating any other war.

In the end, contexts and meanings change. A day will come when the names that appear on the Vietnam Memorial's wall are known to few living persons. On this day, the intensity of feeling evoked by the wall

will be less acute; the flags and objects that decorate the wall will be less dense; the solemnity that now grips those who enter the Memorial site will be diluted by an air of casualness; the ritual relation that now links shrine and pilgrim will become a mundane relation that links attraction and tourist. On this day, the Vietnam War will have become a less fitful part of American history. But the Vietnam Veterans Memorial, its several parts continuing to reflect different aspects of and beliefs about the war, will echo the ambivalence with which that war was first commemorated.

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# Culture as Class Symbolization or Mass Reification? A Critique of Bourdieu's *Distinction*<sup>1</sup>

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Pierre Bourdieu's theory of culture as a system of symbols furthering a misrecognition of class is critically compared to the Frankfurt school's theory of culture as reifying commodities furthering an unrecognition of class. Because of their approaches to history, both theories recognize only part of the complex reality of modern capitalist culture. Bourdieu's ahistorical structuralism fails to grasp the historical changes produced in culture by capitalism, while critical theory's essentialism fails to specify the concrete factors mediating the historical effects of capitalism on culture. As a corrective to both, a neo-Marxist theory is developed that grasps the totality of capitalist culture by grounding the effects of class on culture in concrete, historical class struggle.

The main theme of the voluminous and multifaceted sociological corpus of Pierre Bourdieu is the reintegration of the economic and cultural dimensions of society. Unlike many if not most sociologists, who reduce one dimension to the other, Bourdieu argues that culture and economy are intricately related in a web of mutual constitution. The class distinctions of the economy inevitably generate the symbolic distinctions of culture, which in turn regenerate and legitimate the class structure. Taking his cues largely from Weber, Bourdieu reveals class and status to be inextricably related dimensions of social life.

This project has culminated in Bourdieu's (1984) "big book," entitled *Distinction*. The results are impressive, both in theoretical conceptualization and empirical verification. Not since the Frankfurt school's efforts has there been such a serious attempt to reveal how culture and consumption contribute to the reproduction of the class system of modern society.

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And the efforts of Bourdieu are superior to those of Horkheimer, Adorno, and others in two respects. While their analysis of mass culture is most often abstract and philosophical, Bourdieu's analysis of cultural taste is painstakingly empirical. And while the Frankfurt school paints impassioned portraits of cultural conspiracies, the French sociologist offers up a cool blueprint of a structure of class and culture whose logic produces its effects behind the backs of individuals.

While Bourdieu has moved the analysis of class and culture beyond speculations of conspiracies, he has paid a price for this advance. Instead of transcending Frankfurt insights, *Distinction* merely abandons them. Gone is the idea of culture as reification, a mystified screen of things that obscures the real class relations between people. In its place is the Veblenesque concept of culture as a system of class symbols that reveal relative position in a game of invidious distinction. And more important still, Bourdieu abandons the concept of people as cultural actors engaged in praxis that is capable of revolutionizing as well as reproducing the class system. He discounts any real agency in favor of a class structure that is internalized in individuals and determines cultural choices that reproduce that class structure.

In what follows, I criticize Bourdieu's theory of culture and consumption around these two critical weaknesses highlighted by comparison to the Frankfurt school. First, I argue that Bourdieu overextends his model of culture as class symbols in a game of emulation. Although such a Veblenesque conception may be valid for the nonmaterial culture of late capitalist societies, the material culture more closely conforms to the Frankfurt school's notion of culture as mass reification. Bourdieu ignores the reification of material culture because his theory is ahistorical and fails to grasp the specificity of the culture of capitalism and the changing relations of production on which it is based. But the Frankfurt school conversely ignores the continued existence of class distinctions in nonmaterial culture because, while it recognizes the effects of changing class relations on culture, it fails to specify the historically concrete factors that mediate these effects.

Second, I show that Bourdieu's failure to grasp the reification of material culture is grounded in a more fundamental flaw—a structuralist conception of culture that reduces cultural choices to passive reproductions of structural necessities. By contrast, the Frankfurt school offers a more dialectical conception of culture as human praxis to realize human needs that may transform as well as reproduce class structure. But critical theory fails to specify the concrete historical conditions under which this praxis becomes either reproductive or revolutionary. I conclude that both theories and their supporting evidence may be incorporated into a

broader neo-Marxist theory of class legitimation, which grounds the effects of class on culture in historical class struggle.

#### BOURDIEU'S THEORY OF CULTURE AS A REPRODUCING STRUCTURE OF CLASS SYMBOLS

*Distinction* appears as the magnum opus of Bourdieu's long-term project to reintegrate the realm of culture into the sociology of stratification and class. Rejecting the one-sided materialism of Marxist class analysis, Bourdieu seeks to reveal the indispensable contribution that the consumption of symbolic goods makes to reproducing class domination through legitimation and selection. For him, self-interested behavior cannot be confined to the economic realm alone but must be theoretically generalized to cultural practices also. People pursue scarce goods and maximize their profits not only in economic "fields" of contest but also in cultural fields. As in economic struggles, people in cultural contests employ "capital" resources that they have acquired or inherited in their efforts to maximize their "profits." But in cultural fields of struggle these resources are "cultural-capital"—symbolic abilities, tastes, and goods—and the returns are "symbolic profit," dividends of social honor or prestige (Bourdieu 1977, pp. 177–83).

Bourdieu's formulation sounds remarkably like Weber's multidimensional conflict theory, with its separate but interpenetrating struggles of class, status, and power. While acknowledging his debt to Weber, Bourdieu simultaneously distances himself from his specific formulations, stating that *Distinction* is "an endeavor to rethink Max Weber's opposition between class and *Stand*" (Bourdieu 1984, p. xii). In his historicist and nominalist framework, Weber postulates no universal relation between the two dimensions of stratification. Status, defined by life-style, may coincide with class, writes Weber (1968, p. 932), but the two normally stand in "sharp opposition." In his search for a general theory applicable to all societies, Bourdieu postulates an invariant relation of structural determination between economic position and life-style. For him, classes always appear as status groups, whose culturally stratified tastes and goods legitimate the system of economic domination by presenting it in a misrecognized form. Naked acts of class interest are clothed with the mantle of the selfless pursuit of commonly recognized symbolic goods, making winners appear not as exploiters but as gifted individuals with superior cultural endowment (Bourdieu 1977, pp. 163–65).

Bourdieu argues that the structure of economic positions is translated into and misrecognized as cultural symbols and life-styles inherent in individuals through the mediating structure of habitus. The habitus is a

system of durable dispositions that is socially conditioned by the objective structure of society. In the process of socialization, people in different class positions are exposed to different "material conditions of existence," which give rise to characteristic ways of perceiving and being in the world. This deeply rooted habitus gives rise to all specific tastes in food, clothing, art, and so on. The habitus is thus a generative structure that provides the unifying principle of the specific practices in different cultural fields. But it is a social structure—the class structure so deeply embodied in individual dispositions that they appear natural and obscure their social origins (Bourdieu 1977, pp. 72–97).

The class structure of society becomes embodied in these habitus by determining the exposure of individuals to different material conditions of existence. Classes, Bourdieu states, are defined by different levels and types of capital, both economic and cultural. Individuals with little capital are continually exposed to material scarcities and the consequent economic necessity of making a living, while those with greater capital share an objective distance from the material urgencies of life. The distance from economic necessity conditions different class habitus, which in turn generate different cultural tastes (Bourdieu 1984, pp. 53–56, 169–75).

In *Distinction*, Bourdieu distinguishes three broad classes, each of which is unified by similar tastes and life-styles: the bourgeoisie, the petite bourgeoisie, and the working class (peasants and industrial workers). The bourgeois class possesses a high volume of capital, which distances it from the economic necessities of life. These material conditions engender a "taste for freedom," a preference for cultural objects and practices that are removed from mundane material functions. This bourgeois taste engenders an "aesthetic disposition," a propensity to stylize and formalize natural functions in order to lift them above mundane materiality and, in so doing, display their distance from this realm of necessity (Bourdieu 1984, pp. 18–63).

The bourgeois taste for freedom is defined in opposition to the working-class taste for necessity, which serves as a mere foil in the game of distinction. Having little capital, peasants and industrial workers must of necessity be constantly concerned with the practicalities of material existence. But Bourdieu contends that this economic necessity becomes ingrained as a taste, an actual choice or preference for things that are functional, natural, unformalized, and sensual. Bourdieu paints workers as down-to-earth creatures who reduce practices to their functions and are unconcerned about games of distinction (Bourdieu 1984, pp. 372–96).

Between these two main systems of class tastes is the petite bourgeoisie—those of moderate capital distinguished by their taste for pretension. The petite bourgeoisie aspires to bourgeois distinction but has neither the capital nor habitus to really achieve it. Hence, these

upstarts seek to superficially adopt a life-style not their own, to become something they are not by borrowing the outward signs of legitimate culture (Bourdieu 1984, pp. 318–71).

Bourdieu holds that the value society assigns each of these distinct class cultures is strictly arbitrary and determined solely by power. The dominant class is able to impose its life-style as the legitimate standard of judgment by sheer force, or “symbolic violence” (Bourdieu and Passeron 1977, pp. 4–8). But this arbitrary act of violence is hidden from view and thus accepted by the victims themselves. Consequently, those who possess the dominant culture have their power legitimated and reproduced. The economic power of their class is hidden behind a facade of individual cultural worthiness or giftedness, behind the “ideology of charisma.”

As others have noted (Elster 1983; Miller 1987), Bourdieu's conception of culture is highly reminiscent of that offered in Veblen's (1934) *Theory of the Leisure Class*. Both Bourdieu and Veblen conceive of life-styles as resources in a class contest for honor, which is won by that displaying the greatest distance from economic necessity. Bourdieu uses Veblen's concept of “conspicuous consumption,” arguing that the privileged display the abundance of their resources by ostentatious waste (Bourdieu 1984, pp. 55, 281–82). And his analysis of education as cultural capital is anticipated by the last chapter of *Theory of the Leisure Class*, entitled “Higher Learning as an Expression of the Pecuniary Culture” (pp. 363–400).

Bourdieu (1985*b*, 1988/89) forcefully denies any similarity of his ideas to the theory of conspicuous consumption. What he objects to most is Veblen's conception of consumption as a rational choice of certain goods and life-styles in the pursuit of distinction. In his theory distinctive conduct “has nothing to do with rational choice,” since it is the product of a habitus, a practical sense that is not consciously formulated or chosen (Bourdieu 1988/89, p. 783). But their different emphases on intentionality should not disguise the decisive similarity between Bourdieu and Veblen on the fundamental nature of culture. In conceiving of culture as necessarily oppressive, an inevitable support of the class system, Bourdieu's analysis shares what Adorno (1981*b*) calls Veblen's “attack on culture.” For both, all culture is barbaric because it is inextricably involved in the class struggle for dominance.

#### CAPITALIST CULTURE AS MASS REIFICATION: THE CHALLENGE OF THE FRANKFURT SCHOOL

*Distinction* surprisingly ignores the cultural theory of the Frankfurt school, which offers a powerful challenge to the book's Veblenesque

theory of class cultures. Although Frankfurt theorists like Theodor Adorno, Max Horkheimer, and Herbert Marcuse share Bourdieu's intent of integrating Weber's concern for cultural legitimation with Marx's class analysis, they offer a different theoretical solution—late capitalist culture legitimates the class structure by *obscuring* classes altogether rather than establishing a hierarchy of honor between them. Bourdieu contends that culture legitimates class by furthering a *misrecognition*. Symbolic behavior displays class differences in a recognizable form, but one that diverts attention from their true origins in group power by making them appear as differences in individual worthiness. By contrast, Frankfurt or critical theorists argue that culture performs its ideological function for the class system by preventing any recognition of class differences, even a mistaken one. For them, culture makes classes totally *unrecognizable* by burying them beneath an indistinct mass culture shared by all.

The Frankfurt notion of a class-obscuring mass culture is developed through use of the Hegelian concept of reification, as adapted by Marx to the analysis of capitalism. Marx (1977, pp. 163–77) states that in capitalism the fundamental class relations between people appear as relations between things, commodities circulating in the market according to natural laws. In *History and Class Consciousness* (1971), Georg Lukács applies Marx's concept of economic reification to the cultural realm, arguing that capitalist culture legitimates exploitative class relations by hiding them behind unifying facades of nature. Adorno, Horkheimer, Marcuse, and others extend Lukács's analysis of reified culture to modern consumer capitalism, in which the production of cultural goods is taken over by large, concentrated industries whose sole motive is profits. As a result, culture becomes a commodity, whose production and distribution is subordinated to the technological rationality of domination in the factory and the marketplace. The culture industry produces art, music, and literature as commodities, subjecting them to the standardization and homogenization of mass production. In the process, all critical distinctions and disturbing connotations are eradicated from cultural commodities, so that they are palatable to the broadest possible market. This mass culture is offered to consumers as a compensation, a substitute satisfaction for the needs denied them as degraded and alienated producers in capitalism. And because all classes participate in this mass culture, albeit unequally, ostensible class differences are leveled by the consumption of its standardized commodities. Real qualitative differences in class power take on the appearance of merely quantitative differences in the possession of the same goods (Horkheimer and Adorno 1972; Marcuse 1964; Adorno 1978).

Frankfurt school theorists thus argue that culture is ideological not



because, as Bourdieu holds, it is "an expression of class standpoints" but because "the existence of classes is concealed by ideological appearances" (Adorno 1976, pp. 68, 55). In his *Introduction to the Sociology of Music*, Adorno specifically criticizes the type of empirical research generated by the former position, which seeks to associate specific cultural tastes with social class. "Inquiries into the social distributions and preferences of musical consumption tell us little about the class aspect" (1976, p. 56). Although he is probably criticizing the empiricist research of Paul Lazarsfeld, in whose Princeton Radio Research Project he participated, it is almost as if Adorno were referring to Bourdieu when he ridicules this type of research as equating "pure science with knowing whether middle-income urban housewives between the ages of 35 and 40 would rather hear Mozart or Tchaikovsky, and how they differ in this point from a statistically comparable group of peasant women. If anything at all has been surveyed here it is strata defined as subjectively characterized units. They must not be confused with the class as a theoretical-objective concept" (1976, p. 56).

Adorno argues that the cultural preferences of these strata are actually created by the manipulative marketing strategies of the culture industry. In order to hawk more wares, markets are divided and subdivided by social variables in market research, and products are differentiated and stratified to appeal to these niches. But these product distinctions, which lend cultural goods a pseudoindividuality to placate the need for real individuality denied in production, are in reality superficial differentiations of fundamentally similar goods. They do not correspond to but conceal class differences (Horkheimer and Adorno 1972, pp. 121–24, 154–56).

The differentiation offered consumers by the culture industry is superficial not only because its products are in reality produced in a standardized production process but also because they are consumed in a standardized process that cuts across all social categories. Bourdieu (1984, p. 100) sustains his theory of class cultures by holding that even when objectively identical products are consumed by different classes, they are appropriated and perceived differentially according to their respective habitus. By contrast, Frankfurt theorists support their theory of mass culture by arguing that even when objectively different products are consumed by different classes, they are appropriated similarly, thus leveling any cultural differences between classes. Bourdieu explicitly offers (1984, p. 588) what he thinks is a devastating criticism of Adorno's analysis of popular music by showing that legitimate music is also repetitive and passively consumed. But that is precisely the point of Adorno's (1978) critique of music that is dominated by the culture industry. Despite the

ostensible differences in content, both popular and classical music are consumed in the same fetishistic form, in which the popularity or market success of the composition is valued over its intrinsic worth as art. In material products like automobiles, such consumption focuses not on the intrinsic quality of the mechanism but the fetish of the trademark, which testifies to the car's standing in the artificial prestige hierarchy. Such consumption offers people ersatz satisfaction of their unfulfilled needs and conceals the real differences in class power beneath a mass of artificially differentiated commodities.

The Frankfurt school's theory of mass culture has been justly criticized for certain weaknesses. Bourdieu (1984, p. 386) correctly points out that critical theorists often commit the short-circuit fallacy—establishing a direct, unmediated link between economic structure and cultural practices. They do not make explicit how and why the reified, class-obscuring logic of capitalism infiltrates and dominates culture. The implicit answers are rather functionalist and essentialist. The capitalist system requires a mass culture that hides class divisions to reproduce itself, so it emerges. This functionalism often degenerates into crude instrumentalism, in which omnipotent elites consciously manipulate culture to perpetuate the domination of the masses, who passively accept whatever is foisted on them (Kellner 1984–85; Miller 1987).

Despite these problems I think that critical theory's conception of a mass culture that obscures class differences is a powerful and indispensable tool for understanding the legitimating role of culture in late capitalism. But it should be conceptualized as a complement, not as an alternative, to Bourdieu's conception of a culture of class symbolization. Both theories capture part of the cultural reality of late capitalism but err in generalizing from this part to the cultural whole.

#### CLASS CULTURE OR MASS CULTURE: EMPIRICAL ARGUMENTS

There is good empirical evidence from a variety of sources to at least partially validate Bourdieu's idea of culture as symbolizing class differences as well as the Frankfurt school's notion of a mass culture obscuring class differences. Although this evidence may seem at first contradictory or at least inconsistent, a close examination reveals that it is drawn from different parts of the cultural reality of late capitalism.

In order to bring empirical data to bear on this debate, we first need to clarify the exact nature of the disagreement between Bourdieu and the Frankfurt theorists. Both theories postulate differences of attitudes and outlooks between classes. There is ample empirical evidence that documents these subjective differences generated by class position, most of it

consistent with Bourdieu's characterization of class habitus.<sup>2</sup> The two theories differ, however, on how and whether subjective class differences are objectified in cultural consumption and life-style. Bourdieu argues that class differences produce visible cultural differences in all fields, but because these cultural differences are mistakenly perceived as originating in individual worthiness rather than class position, they end up legitimating the class system. The Frankfurt theorists contend that subjective class differences are obscured by the objective homogeneity of mass culture, which legitimates the class system by making its real differences invisible.

Bourdieu offers a great deal of empirical data from his and others' surveys that purport to reveal objective differences in cultural consumption between the classes. But upon close examination these data do not unequivocally support the broad theoretical generalizations of the text. The evidence for class differences is systematically stronger in fields of nonmaterial culture like visual art, music, and literature than in fields of material culture like food, clothing, and furniture. Thus, for example, in the field of music, class is clearly and strongly associated with knowledge of and preference for legitimate or classical music. When asked which musical compositions they preferred, 1% of the working class chose the legitimate works, as opposed to around 30% of the upper class. And when asked to identify the composers of 16 classical works, none of the manual or clerical workers but over 20% of the upper class named more than 12 (Bourdieu 1984, pp. 15, 64). In the field of visual art, the upper class displayed its formal aesthetic by stating much more frequently than the working class (20% and 6%, respectively) that an object socially designated as meaningless, like a cabbage, could make a beautiful painting. The working class revealed its functionalist aesthetic by stating a greater preference than the upper class (88% compared to about 60%) for superficially pretty subjects like a sunset over the sea (Bourdieu 1984, pp. 37–38).

Bourdieu's data in these fields are supported by other studies, which also found a positive correlation between class position and preference for and participation in the high arts (DiMaggio and Useem 1978*a*, 1978*b*, 1982; Blau 1986; Hughes and Peterson 1983; Gruenberg 1983). Research by Paul DiMaggio and his associates also seems to support Bourdieu's thesis that cultural capital in this area of high arts acts as a means of class selection and reproduction. They have demonstrated that interest in and familiarity with high arts is positively related to student grades,

<sup>2</sup> For a good summary of the evidence on subjective class differences, see Randall Collins (1975, pp. 67–87; 1988, pp. 208–20).

educational attainment, and the status of future spouses (DiMaggio 1982*a*; DiMaggio and Mohr 1985).

The data do not, however, seem sufficiently strong to support Bourdieu's contention that class life-styles are sharply segmented and insular. There appear to be no rigid class boundaries between popular culture and high culture. Although the upper class clearly has more knowledge of and participation in high culture, research has also shown consistently that its members also participate in the popular culture, often at levels commensurate with the lower classes. For example, in his study of the cultural activities of American men, Wilensky (1964) found that while the more educated spent more time consuming high culture than the less educated, they spent a great deal more time absorbing popular culture. DiMaggio and Useem (1978*a*) found that the well educated and persons of high occupational prestige did and liked more of almost all culture. Bourdieu's own data seem to reflect the existence of this mass culture, in which all classes participate, alongside the high culture dominated by the upper class. For example, although a much larger proportion of the upper class (20%) stated that a cabbage could make a beautiful painting than did the working class (5%), a majority of all classes stated that a sunset over the sea made a beautiful painting. And while the upper class expressed a greater preference for legitimate music than the working class, a substantial proportion of all classes expressed a preference for popular music (Bourdieu 1984, pp. 64, 37–38).

The existence of a common, mass culture seems even more prominent in the area of material culture. While Bourdieu claims that class habitus dictate the consumption of different types of physical products, his data belie this generalization and indicate class differences significantly smaller than those revealed in nonmaterial culture. In the field of food, for example, Bourdieu claims that the working-class taste for necessity dictates foods that are fatty and heavy, while the bourgeois taste for freedom dictates lighter, leaner foods. Yet data on the distribution of expenditures among the various food categories are surprisingly similar across classes. Manual workers spent 2.4% of their food budget on fresh fruit, while senior executives spent 3.1%; on fats, workers 5.3%, executives 4.3%; on beef, 8.1% versus 9.8%; on fresh vegetables, 5.4% versus 5.5%; on cereals, 8.9% versus 7.5% (Bourdieu 1984, pp. 181–82, 188–89). We are told that the working-class meal stresses informality and abundance, while the bourgeois meal stresses formality and ceremony. But the data presented reveal that differences between the classes are small. Even when entertaining guests, the majority of all classes preferred to offer guests a full meal rather than a buffet, liked their guests to dress casually rather than elegantly, and preferred for guests to choose their own places rather than designating places. And while working-class

people answered more frequently than the middle or upper class that the most important aspect of spontaneous entertaining was having enough to eat (34%, 28%, and 26%, respectively) nearly an identical proportion of workers (33%) answered that it was important that guests not be bored (Bourdieu 1984, pp. 198–99).

In the field of domestic furnishings, Bourdieu tells the reader that the working-class taste for necessity is expressed in the preference for homes that are clean and practical, while the bourgeois taste for freedom imbues preference for the studied and imaginative interior. The data reveal that higher occupational groups did describe the ideal domestic interior as “imaginative” and “studied” more often than the lower groups, who were more likely to mention “clean” and “practical” in their descriptions. But the adjectives most frequently used by nearly all groups, high and low, were “comfortable” and “cozy” (Bourdieu 1984, pp. 247–48).

A recent ethnography of blue-collar workers lends credence to this notion that a mass culture shared by all classes and centered largely on material commodities exists alongside a high culture dominated by the upper class and focused on nonmaterial arts. In his study of chemical workers in one New Jersey refinery, David Halle (1984) found that their distinctive position at work led to subjective attitudes and beliefs that were clearly different from white-collar employees. The blue-collar workers were generally dissatisfied with their work and resentful of their immediate bosses and corporate power in general. They held few aspirations for individual advancement but pinned their hopes for the future on collectively won gains in wages and benefits.<sup>3</sup> So on the job Halle's workers saw themselves as “working men” and, with a certain amount of class consciousness, marked themselves off from white-collar employees and managers. But outside of work these subjective attitudes were not objectified in a distinctive class style of cultural consumption. These well-paid blue-collar workers led leisure lives rather similar to white-collar employees, for their overlapping incomes allowed them to purchase similar goods and services. Halle (1984, p. 294) concludes: “In modern America there are no ‘working-class’ cars, washing machines, video recorders, or even, with some exceptions concentrated on the young, styles of dress. In an urban department store or a suburban shopping mall, it is hard to know if a customer has a blue- or a white-collar occupation.”

In the world of cultural consumption these chemical workers did not see themselves as a distinct group but as part of a broad “middle class” in a continuum of consumption that overlapped and blurred the class oppositions of work. In a study of similarly affluent manual workers in

<sup>3</sup> These findings are validated by other studies of blue-collar workers. See, e.g., Goldthorpe et al. (1969); Chinoy (1965); and Nichols and Beynon (1977).

England, Goldthorpe et al. (1969, p. 147) also found that their privatized and materially abundant leisure lives caused them to view themselves as part of a large central class defined not by power or prestige but by income and material living standards. Coleman and Rainwater (1978, pp. 24–33) similarly found that a majority of all Americans perceived the class system not as a rigidly delineated structure but as a complex, infinitely graded hierarchy of income and consumption. And positions in this imbricated hierarchy were legitimated by beliefs in differences not of natural giftedness or merit, as Bourdieu contends, but of effort and ambition (p. 241).

In detailing the participation of blue-collar workers in a broad mass or “middle-class” culture, Halle lists mainly material commodities they shared with others. He found, however, that these chemical workers did feel distinct and inferior with respect to some forms of nonmaterial culture—namely, the high arts and education. Few of these workers had any interest in classical music, ballet, opera, or literature. And they felt uneasy and inadequate about their lack of formal education. Most described their experiences in school as humiliating and were openly hostile to the teachers who judged them as inadequate. And the part of their education that many felt most uncomfortable with and hostile toward was the high arts. In the fields of high arts and education, culture seems to mark out class distinctions, as Bourdieu contends. By doing so, it legitimates the class structure by making the lower classes feel inadequate, and reproduces it by selecting for educational success only those already inculcated with cultural capital (Halle 1984, pp. 48–50, 130–32, 169–70, 208, 295).

The empirical evidence reviewed thus far reveals that both Bourdieu's theory of class symbolization and the Frankfurt school's theory of mass reification have validity, but for different aspects of the culture of late capitalist societies. There do appear to be distinct differences in the consumption of nonmaterial culture, especially the high arts, which objectify and legitimate class positions. But in the realm of material commodities, there exists a qualitatively indistinct mass culture, which obscures class divisions behind a mass of material goods that distinguish individuals solely by the quantity of their income. My own study of one prominent artifact of contemporary material culture, the automobile, further demonstrates the limits of Bourdieu's generalizations about class cultures.<sup>4</sup>

Bourdieu (1984, p. 231) writes that consumer goods are produced in a variety of forms that express the distinct tastes of classes and class frac-

<sup>4</sup> My study of American automobile design will appear in a book tentatively entitled *Auto Opium: A Social History of American Automobile Design to 1970*. For a preliminary summary, see Gartman (1986b).

tions because each group has its own producers. The competitive struggles between producers in the marketplace lead each to produce a distinct product. And each supply finds a matching demand, not because producers come from the same class as their consumers but because producers' positions in the field of production—rearguard versus avant-garde, established versus outsider—are homologous to class positions consumers occupy in the field of consumption (Bourdieu 1984, pp. 230–34; 1983, pp. 325–26; 1986, pp. 138–49).

But this generalization is certainly not true of the automobile, which Bourdieu uses to exemplify his theory (1984, pp. 128–29, 278–79, 548–51). Bourdieu's theory assumes a highly competitive market in which numerous producers jockey to find consumers, but the market for American automobiles, like many other material commodities, is unquestionably oligopolistic. The handful of huge corporations that dominate production do not specialize in one market niche but offer a wide range of products that blankets all markets, from the cheapest to the most expensive. And the different automobile models offered by each oligopolistic corporation cannot appeal to specific class tastes because they are all designed by the same designers. Typically, the automobile designers of a corporation are not responsible to one of its several model-producing divisions but are grouped in a staff department directly responsible to top corporate managers. Often working in a separate center geographically and organizationally removed from divisional managers, this design staff is responsible for the aesthetics of the entire range of corporate products, from the cheapest to the most expensive. Although there is often a separate studio for each division, this separation exists not to create products that differ fundamentally in aesthetics to appeal to different class tastes but to superficially differentiate the few structural foundations from which all corporate cars are produced. The different automotive nameplates of each corporation generally share the same few body shells, which are given distinct divisional identities by the addition of largely superficial details: headlights, taillights, grilles, fenders.

The empirical facts of automobile design reveal that these artificially differentiated models do not and cannot appeal to a variety of distinct class tastes. If this were the aim, design personnel would have to be rigidly specialized by division, spending their entire careers cultivating a specific class style. But in most corporations designers are juggled around constantly. And independent designers who contract with corporations also design a variety of automobiles across the entire price spectrum. What is more, my interviews with auto designers reveal that they do not apply different aesthetic standards to different lines of autos. They try to accomplish the same basic look in all lines. For example, economy cars that sell to lower-income groups are not designed specifically to

appeal to their inherent "functionalist aesthetic." Designers know that no one wants a car that looks cheap, that screams stripped-down functionality. So they attempt to make economy cars look as much like their expensive corporate relatives as is possible within the cost restraints given them and while maintaining the separate identities of the lines. The quantity of features and embellishments on the various makes in the automobile hierarchy are varied by designers to justify the price differences. But the quality of aesthetics is basically the same across the hierarchy, so the graded models cannot testify to distinct class tastes. More expensive cars offer those with more money to spend not qualitatively different aesthetics to testify to superior taste but merely more of what everyone has a taste for.

Empirical evidence on automobiles and other artifacts of material culture is more compatible with the Frankfurt school's arguments that modern culture legitimates class by obscuring rather than symbolizing class differences. The qualitative hierarchy of class power is obscured by a quantitative hierarchy of material consumption in which people are differentiated by the income rewards of a seemingly equitable market. Hierarchies of material products like autos ideologically transform the *contradiction* of class power into a *continuum* of consumption, in which position is legitimated not by inborn taste but by individual market efforts, as surveys routinely reveal (Coleman and Rainwater 1978, pp. 24–33, 241; Goldthorpe et al. 1969, pp. 146–56).

## HISTORY, CLASS, AND CULTURE

The empirical evidence shows that there is a partial truth in the theories of both Bourdieu and the Frankfurt school. While the material culture of consumer commodities in late capitalist societies seems to obscure the differences between classes, the nonmaterial culture, especially the high arts, demonstrates distinct cleavages that symbolize classes. I believe the partial vision of each is explained by their respective approaches to historical development. Bourdieu's basically ahistorical theory projects onto capitalism a model of class and culture derived from a precapitalist past and thus fails to capture the cultural dynamics introduced by the specific class relations of capitalism. The Frankfurt school's essentialist theory overgeneralizes the historical trends introduced into culture by capitalist commodity relations and thus fails to recognize the persistence of certain precapitalist cultural relations. I propose to correct both theories by a neo-Marxist approach to culture that focuses on the mediating factor of historical class struggle.

Bourdieu (1984, p. xii) asserts that the relationship between class and culture presented in *Distinction* is "valid . . . for every stratified soci-



ety." He acknowledges some historical variation in modes of class domination and their legitimation. But his theory of historical development is a severely truncated, two-stage model in which the relation between class and culture changes only in form. Bourdieu distinguishes between precapitalist and capitalist societies on the basis of the degree of objectification and autonomy of economic and cultural capital. In precapitalist societies, economic and cultural resources are uninstitutionalized and undifferentiated from each other. Relations of economic domination are direct and personal, reproduced in daily interaction through the exercise of violence. To secure legitimation, the economic capital used to dominate others is continuously translated into and disguised as the cultural or symbolic capital of honor in personal ceremonies like potlatches and gift exchanges (Bourdieu 1977, pp. 171–97).

With the coming of industrial capitalism, however, the market institutionalizes economic capital, making it objective and impersonal. Industrialization also renders cultural capital autonomous from economic capital. The increasing income and education of the dominated classes creates a large, culture-consuming public and, consequently, cultural institutions independent of the dominant class. Producers in this field of mass-cultural production serving the lower classes are motivated by economic profit to seek the largest possible market and hence reduce standards to the lowest common denominator. Alongside them, however, emerges a separate field of restricted production, where cultural goods are produced for other culture-goods producers in the pursuit of symbolic profit through adherence to disinterested aesthetic standards (Bourdieu 1985a, pp. 14–33; 1983, pp. 319–22).

Bourdieu contends that in early capitalism the economic and cultural fields remain separate. The objective mechanism of the market itself hides inequalities of economic capital, so there is no need for a symbolic veil of misrecognition. But this early stage ends when, as Bourdieu vaguely states, the ideological effects of the market are "uncovered and neutralized." Consequently, legitimation of class domination requires a return to cultural misrecognition of economic capital through its conversion into symbolic capital (Bourdieu 1977, p. 196). This is accomplished by the bourgeois consumption of the cultural products of the field of restricted production, to which their habitus naturally inclines them. Such consumption not only distinguishes the bourgeoisie from the working class but also consecrates it with the air of disinterestedness and personal worthiness that accompanies this cultural realm autonomous from the economic market (Bourdieu 1983, pp. 324–25, 335–37; 1985a, pp. 22, 31–32). So after a brief separation of economic and cultural capital in early capitalism, once again the two are integrated in a system of legitimation in which class power is misrecognized as individual gifted-

ness or charisma. Bourdieu's history of class ideologies is not really much of a history at all, but the story of an eternally occurring relation that changes only in form.

This essentially ahistorical formulation fails to recognize the historical specificity of the culture of capitalism and the relations of production on which it is based. Bourdieu generalizes the peculiarly precapitalist ideology of charisma into capitalist societies. Following Weber, he uses the concept to denote a system of beliefs that legitimates differences in power by reference to the intrinsic qualities of individuals displayed in distinctive life-styles. But Weber confines charismatic authority mainly to precapitalist societies, in which personal power relations require ideologies that justify the person as superior. He argues (1968, pp. 241–54) that the rationalization process brings the impersonal rule of economic and political bureaucracies, in which authority is justified by the rationality of the structure, not the worthiness of individuals.

Bourdieu ignores this change in the nature of cultural legitimation largely due to his conceptualization of class, which rejects the Marxist emphasis on positions in production in favor of a Weberian emphasis on positions in the distribution of goods.<sup>5</sup> He defines class as a structural position in a distributional space of two resources: economic capital and cultural capital. An individual's combined returns from these two fields determine his or her class position. In modern societies, primary class differences are determined by the overall volume of combined capital, with secondary differences (class fractions) derived from the relative proportion of the two different capitals held (Bourdieu 1984, pp. 99–125).

But this definition of class has a tautological relation to culture, the variable it is constructed to explain. Bourdieu explains variation in culture and life-style by class position, yet he defines class in part by the distribution of cultural capital. Since the latter is acquired through socialization in the family or school, the explanation degenerates into simplistic cultural transmission—classes have different life-styles because they learn different life-styles at home or in school. This argument begs the question of how these transmitted class life-styles originate to begin with and ignores what is supposedly the intervening variable between class and life-style—habitus engendered by conditions of material existence.

Bourdieu sidesteps this tautological problem at places by giving subtle primacy to economic over cultural capital in determining life-style. He states in one passage (1977, p. 83), for example, that class habitus “are engendered by the objective structures, that is, in the last analysis, by

<sup>5</sup> Bourdieu (1985*b*, 1987) rejects Marxist class analysis on the grounds of its substantialism, economism, and objectivism. These criticisms are, however, simplistic and fail to acknowledge the diversity of 20th-century Western Marxism. For a good discussion of Bourdieu and Marx on class, see Brubaker (1985).

the economic bases of the social formation in question." And in *Distinction* (1984, pp. 115, 136), positions in the economic base are defined mainly in terms of income. So in the last analysis Bourdieu argues that income engenders habitus, which in turn determine consumption (1984, p. 375).

Bourdieu's analysis of class as position in economic *distribution* fails to capture the historical changes in economic *production* that condition culture. Because the distribution of resources remains similarly unequal across capitalist and precapitalist societies, he postulates class cultures that similarly symbolize this inequality. Marxism's focus on class as relations of production makes it potentially more cognizant of historical changes induced in culture. For Marxists, the distribution of market incomes in capitalism is epiphenomenal, the surface appearance determined by the relations between classes in production. At this level exists the more fundamental inequality of power to control the process of social labor.

The Frankfurt theorists of mass culture focus on this Marxist conception of class inequality to explain the historically variant forms of cultural legitimation. Following Marx (1977, pp. 170–71) and Lukács (1971, pp. 83–110), they argue that the relations of labor control in precapitalist societies are direct and personal. Precapitalist culture bears the marks of these direct relations of subordination, for it is obviously the exclusive preserve of the dominant classes who alone have the power and resources to cultivate and appropriate nonessential goods. However, with the rise of capitalism the relations of power in production become indirect, with workers subordinated to capitalists through the impersonal exchange of labor power for wages. Thus, class relations become reified, appearing not as human power relations but as relations between things exchanged in the market. With Lukács, critical theorists argue that the reified relations of production are extended to culture as it becomes produced by large-scale, commercial enterprises. Mass production reduces the distinctions of cultural products, thus hiding the real differences in class power behind a facade of standardized things consumed by all.

While their historical focus on changing forms of class domination in production makes critical theorists more cognizant of changing forms of class legitimation, their use of history is flawed by its essentialism. Heavily influenced by Hegel, the Frankfurt school gives us a history of class and culture that reads like the unfolding of an essence inherent in capitalism. The concrete, mediating mechanisms that account for the spread of economic reification into the cultural realm are not specified, as Bourdieu points out. This essentialist inattention to historical mediations leads critical theory to ignore the differential effects of reification on culture.

Bourdieu's ahistoricism leads him to postulate the persistence of a

basically precapitalist culture of class symbolization, while the Frankfurt theorists' essentialism leads them to postulate the universal reification of all capitalist culture. A more powerful theory of class legitimation requires a historical model that recognizes the effects of changing class relations on culture but specifies the concrete mediations that explain their differential effects. The corrective to both theories is a model of cultural legitimation in which historical human praxis—that is, class struggle—provides the crucial mediating link between class structure and cultural production.

#### CULTURE AS STRUCTURE OR CULTURE AS PRAXIS

Beneath Bourdieu's ahistorical analysis lies a more fundamental problem that prevents him from recognizing the partial reification of capitalist culture—his conceptualization of culture as a structure that inevitably reproduces the society. Bourdieu's structuralist approach conceives of classes as the passive recipients of a culture that reproduces the structure of domination and carries little potential to transform it.

Bourdieu claims his theory offers a theoretical middle ground between structuralism and philosophies of action by specifying the conceptual link of habitus between objective structures and subjective actions. People chose their actions but not freely, for the dispositions internalized from their structural positions govern these choices (Bourdieu and Passeron 1977, pp. 203–4, 217, n. 31). So Bourdieu's actors do not really act or choose anything—"these enacted choices imply no acts of choosing"—for their actions and choices are predetermined by their habitus (Bourdieu 1984, p. 474). Aesthetic tastes and consumer preferences are really determined by class position—people choose what they are already condemned to. "Taste is *amor fati*, the choice of destiny, but a forced choice, produced by conditions of existence which rule out all alternatives as mere daydreams and leave no choice but the taste for the necessary" (Bourdieu 1984, p. 178). Consequently, these tastes and the cultural practices they motivate inevitably and inexorably reproduce the structures that produce them.

There is contest and struggle in Bourdieu's theory. He postulates that people are incessantly, but not necessarily rationally, pursuing strategies to optimize the returns from their capital within a given field. But these struggles take place solely within the predetermined confines of the field and rarely challenge the rules of the game themselves (DiMaggio 1979, p. 1470). Class conflict in Bourdieu never seems to contradict or change the class structure because it is largely limited to intraclass struggle within the bourgeoisie. He confines his attention almost exclusively to the struggle for power between the dominant and the dominated fractions of the

bourgeoisie and the struggle for symbolic capital within the latter (Bourdieu 1983, pp. 319–26). This intraclass strife never fundamentally challenges the class structure of capitalism, since all bourgeois fractions have an interest in their joint domination of the working class.

Bourgeois struggles for symbolic capital within fields of restricted cultural production do often transform these fields and lead to changes in literature, education, and art. Historic shifts in the relative scarcity of resources within fields disrupt the equilibrium established between the objective opportunities for success within it and the subjective expectations (*habitus*) of individual participants. Such disruptions give rise to cultural struggles between established and parvenu cultural fractions that change a field. In *Homo Academicus* (1988), for example, Bourdieu argues that in the field of education the increase in the number of students and teachers in the 1960s caused a devaluation of their credentials on the job market. This, in turn, produced a discrepancy between the career expectations they internalized under the previous structure and the objective opportunities credentials afforded in the changed structure of the field. The result of this discrepancy was the revolt in the universities culminating in May 1968.

Such challenges to established bourgeois cultural authorities often find resonance within the dominated class due to its homologous position of exclusion and domination. In the May 1968 revolt, for example, upstart students and teachers found temporary support among industrial workers, who were similarly degraded by established educational authorities. However, the course of events usually reveals that bourgeois intellectual challengers have no interest in eliminating cultural authority per se, but merely securing a greater share for themselves. So interclass alliances ultimately dissolve, and temporary “breaks in equilibrium” are restored to the field as the transformed structure of opportunities is internalized in agents (Bourdieu 1988, pp. 156, 167).

So, for Bourdieu, cultural changes are caused not by fundamental struggles between classes with inherently divergent interests but by shifts in resources between individuals and class fractions maneuvering in cultural markets to monopolize symbolic capital. He depicts the dominated class of capitalism as almost completely passive and powerless. Workers actually have a taste for the cultural practices and goods forced upon them by their subordinate class position. In contrast to the bourgeois taste for freedom, the working class has a taste for necessity, for undisguised objects and practices that do not seek to hide their relations to animal functions. Workers have so thoroughly internalized their own domination that they must rely on the symbolic tools supplied externally by bourgeois intellectuals to organize and express their interests. But because these tools are bourgeois in origin, they are limited in their chal-

lenge of the totality of bourgeois society (Bourdieu 1985*b*, pp. 735–44; 1984, pp. 397–465).

Bourdieu's conception of the working class is at once degrading and exalting. He degrades it to the level of an unreflective, animal existence. Workers are "natural" creatures who, because they are reduced to sheer physical labor by the class system, develop a taste for base and animal pleasures (Bourdieu 1984, p. 32). But having thus reduced workers to simple animals, Bourdieu then exalts this animality as the natural form of existence and uses it to launch an attack on the hypocrisy of bourgeois culture. Workers play the role of Rousseau-like noble savages, who are unsullied by the game of cultural distinction played by the bourgeoisie and its "petite" pretenders. Their popular realism "inclines working people to reduce practices to the reality of their function, to do what they do, and be what they are . . . , without 'kidding themselves.' . . . [It is] the near-perfect antithesis of the aesthetic disavowal which, by a sort of essential hypocrisy . . . masks the interest in function by the primacy given to form, so that what people do, they do as if they were not doing it" (Bourdieu 1984, p. 200).

In contrast to Bourdieu's structuralist theory of culture as a reproducing structure, the critical theory of culture as reification is based upon a conception of culture as praxis, a struggle to realize inherent human needs that may fundamentally transform as well as reproduce class structure. For critical theorists, especially Herbert Marcuse, cultural action may contradict and change the social structures in which it is exercised because it has an ontological basis in human needs that are transhistorical. They follow the early Marx in postulating that human beings are by nature active, self-creating creatures whose consciousness gives them the potential for self-determination, activity free from necessity. The historical mode of production constrains and limits the realization of this potential, but it can never totally suppress the natural desire for freedom. While Bourdieu postulates the pursuit of freedom to be a structurally conditioned taste characteristic of the dominant class alone, critical theory holds that the praxis of all people is underwritten by a basic desire for freedom (Marx 1964; Marcuse 1966).

For critical theorists, culture is a realm of praxis that expresses these transhistorical needs and cannot be simply reduced to the social function of reproducing the class structure, as Bourdieu seeks to do. Historically, culture serves a utopian function—it is the expression of the need for freedom that is denied by the class organization of society. While this utopian function can help to maintain the society by providing a safety valve for discontent, it also retains in the collective consciousness the longing for fulfillments which the existing society cannot provide. Consequently, culture always has a negative component that cannot be totally

subordinated to the reproduction of the system. Although modern, reified mass culture exhibits a tendency to eliminate this critical component, even it exhibits utopian strivings for self-determination that cannot be completely absorbed by the class system (Aronowitz 1981; Adorno 1981a; Horkheimer and Adorno 1972; Jameson 1979, 1983; Marcuse 1964, 1966, 1969, 1978).

The weakness in the Frankfurt school's formulation of culture as human praxis to realize freedom is that it is historically underdetermined. Critical theorists tell us little about the specific historical conditions under which cultural praxis becomes either ideological or revolutionary. But this weakness can be corrected by replacing this vague, socially dislocated and historically unspecified praxis by concrete, historical class struggle. The crucial mediating factor that determines the effect of the class structure of a society on its cultural productions is neither Bourdieu's inexorably reproducing habitus or critical theory's dislocated praxis but the socially located, historically specific conflict of dominant and dominated classes. Such an approach is embodied in the pioneering work of Georg Lukács.

In several places, Bourdieu (1983, p. 336; as quoted in Wacquant 1989, pp. 33–34) includes Lukács in his criticism of Lucien Goldmann and other Marxist literary critics for their short-circuit fallacy—that is, making direct and naive connections between the class positions of writers and their cultural productions. Although this fallacy may be characteristic of Goldmann and some Frankfurt theorists, it is not relevant to Lukács, who does not reduce the form or content of a cultural production to the class position of its producer. If truly guilty of such a simplistic reductionism, he would have no grounds for praising the works of some bourgeois writers over others or for condemning the productions of some proletarian writers (Lukács 1973a, 1973b, 1962, 1980a, 1980b). Lukács, like Bourdieu, postulates an important mediating factor between a writer's class position and the nature of the work. But his mediating factor is not a static, reproducing habitus but the dynamic, historical struggle of classes for liberation.

Lukács postulates that the interests of a writer's class position impose cognitive limits on his or her productions, but the nature of these interests is determined by the class's changing relation to humanity's progressive struggles for freedom. So, for example, he argues that the narrative style of bourgeois realists like Balzac, Dickens, and Tolstoy, which depicts reality as a historical creation of the strivings of human beings, is the consequence of the bourgeoisie's progressive struggles against the feudal order in the formative stages of capitalism. Because at this time the bourgeoisie was engaged in the struggle against feudalism—a struggle that served not only its particular interest but the general interest of

humanity in freedom—its cultural producers were able to see the reality of society as a human creation and embody it in narrative about active characters.

After the revolutions of 1848, however, capitalism was consolidated in most Western European societies, and the bourgeois ruling class had an interest no longer in progressive change but in reactionary protection of its rule against the class to whom history passed the interest in freedom, the proletariat. The cultural result of this changed position vis-à-vis class struggle was the descriptive style of bourgeois modernists like Joyce and Flaubert. No longer having an interest in progressive change, bourgeois writers were blinded to the nature of reality as a human creation and began to depict the world as a static, reified thing. In their novels, these writers merely described the established facts of society and created characters who passively adopt various subjective attitudes toward them. People and their relations are not developed but merely described as already constituted products of forces beyond their control. The reality of class and struggle is thus obscured behind this impenetrable facade of static things (Lukács 1973*a*, 1973*b*).

In this Lukácsian formulation, cultural works are understood as reflecting not static class position but active interventions in historic class struggles that may transform, not merely reproduce, social structures. In their productions, cultural producers resolve in formal, imaginary ways the problems and dilemmas of a class in conflict with others. These interventions are always political, although perhaps unconsciously so, since they are the product of, first, the class position of the producer and, second, the historical relation (progressive or reactionary) of that class to the struggles for human liberation (Jameson 1971, pp. 375–400). This theory of culture is in a better position than either Bourdieu or the Frankfurt school to capture the complexities of modern capitalist culture. Unlike Bourdieu's theory of a reproducing structure, it grasps culture as an active praxis that may transform society. And this more historically grounded theory also specifies through the mediating factor of class struggle how and to what extent this praxis influences culture.

Elsewhere (Gartman 1986*b*), I have used this theory to explain the historical development of class-obscuring, reified automobile designs. In what follows I summarize this research to demonstrate the efficacy of the class-struggle theory of culture. The earliest automobiles were expensive, handcrafted vehicles produced in limited numbers by highly skilled workers and consumed almost exclusively by the high bourgeoisie. They were part of an exclusive high culture of conspicuous consumption and leisure constructed by the bourgeoisie during the late 19th and early 20th centuries to legitimate its increasingly visible authority in industry and state in the face of working-class challenges (DiMaggio 1982*b*, 1982*c*, 1987).



These vehicles symbolized a life of leisure and discretion, not only by their largely recreational use by the wealthy but also by their aesthetics. The carefully crafted fit and finish of these cars testified to an unhurried, organic labor process controlled by skilled workers insulated from the hurrying pressures of market and management.

The lure of large-scale commercial gain, however, led some automakers like Ford to move toward the mass production of cheap, standardized vehicles in the 1910s. But the skilled working class resisted capitalist efforts to quicken and cheapen their labor. To overcome this resistance, manufacturers revolutionized the labor process, replacing skilled craft labor with largely unskilled, divided, and mechanized labor (Gartman 1986*a*). This fragmented, alienated labor process transformed the aesthetics of automobiles. To eliminate skilled workers manufacturers had to replace the closely fitted, curving forms of handcrafted cars with the loosely jointed, harshly rectilinear shapes adapted to mass-production machines. The sharp angles, obtrusive gaps and seams, and rigid uniformity of cars like Ford's Model T bore direct testimony to the fragmented, alienated labor process that produced them. Alongside the handcrafted vehicles driven by the wealthy, these mass-produced cars symbolized the degraded class position of the lower classes who drove them, a heteronomous life dominated by the hurrying commands of supervisors and assembly lines. At this stage of the industry, Bourdieu's model of class-symbolizing products was valid. Cars marked class, and popular culture was filled with class jealousies and emulation revolving around the various makes.

The visible links of mass-produced vehicles to the alienated labor process were not socially problematic as long as the auto was mainly a utilitarian vehicle. But when it became the keystone in the new edifice of consumption that provided insulation from and compensation for the ills of the workplace, these aesthetic ties had to be severed. Workers in the newly degraded process of mass production mounted a counteroffensive against this form of class authority. In order to contain this revolt, manufacturers made concessions in the form least threatening to their overall power—wages. Blocked in their efforts to achieve self-determination at work, workers employed their higher wages to construct a small realm of freedom at home, buying products that superficially satisfied their displaced desires. But to serve as substitute satisfactions for needs denied at work, domestic products had to remove all the marks that linked them to this original site of displacement. People could not forget workplace degradation in homes filled with products that bore visual testimony to it, so they demanded products that concealed rather than revealed these relations. In order to meet the demands of this growing popular market of discretionary consumption, manufacturers began

in the mid-1920s to carefully reify their products, hiring industrial designers to hide the ugliness of factory relations behind beautiful, organic surfaces. These efforts were intensified by the class struggles of the 1930s, which made it even more imperative to obscure class-symbolizing product distinctions.

In the automobile industry, this reification of class relations took the form of a superficial "unified appearance" that sealed over the telltale traces of fragmented production. Beginning in the mid-twenties, the auto body expanded to cover the incongruous assemblage of parts until it formed a smoothly integral, all-encompassing shell by 1949. And the angles of the body gradually became less sharp, as gentle curvilinear forms reminiscent of nature replaced the harsh, rectilinear forms that spoke of the unbending discipline of the machine. By superficially adopting these integrated, organic forms, which had previously been the exclusive aesthetic preserve of craft-built luxury cars, manufacturers concealed the signs of mass production and eliminated the obvious aesthetic differences between autos that symbolized class.

This trend toward obscuring the class relations of alienated production did not mean, however, that automobiles became totally homogeneous. On the contrary, there was a proliferation of automobile styles and types aimed at appealing to the consumer's need for individuality that was repressed in the homogenized workplace. And these types were often arranged in product hierarchies, differentiated by price. But the makes in these hierarchies were variations on the same mass-produced foundation differentiated by superficial embellishments that justified price differences. This price hierarchy became positively correlated with the class hierarchy. But because all autos shared a reified design that obscured the marks and relations of mass production, the graded models did not testify to distinct class tastes or real class differences in power but to mere differences in income.

In products of material culture like the automobile, then, class struggle undermined the existence of distinctions symbolizing class position. But this mass reification is not equally extended to the realm of nonmaterial culture, where data reveal that art, music, and literature show aesthetic differences that symbolize and legitimate class. In this realm, the bourgeoisie maintains a class-distinctive culture that casts an aura of personal worthiness on its members. For at least two reasons, working-class struggle for greater consumption is oriented more to material commodities than to nonmaterial cultural practices and hence exerts a greater leveling impact on the former. First, the differences of material culture between classes are more visible. While the distinct bourgeois nonmaterial culture is often practiced in private arenas, differences in material commodities like autos and clothes are conspicuously visible in public places as con-

stant reminders of class gaps. Second, nonmaterial cultural pursuits require extensive training, either formal or informal, in skills of consumption, which is generally denied the working class.

So advanced capitalist societies possess both a mass material and class nonmaterial culture. And the two realms of culture working in unison do a much better job of legitimating and reproducing the class structure than either could separately. In leisure, people consume homogenized material products, which provide the cultural basis for rituals of class-obscuring solidarity. When people of different classes meet at leisure, they can talk the common language of consumerism and feel very much at one with each other. However, at the same time the dominant class distinguishes itself by cultivating a separate realm of nonmaterial culture, which provides the cultural basis for rituals of exclusion. Only the bourgeoisie can talk art, classical music, and literature, thus excluding and subordinating the workers they command at work in rituals testifying to superior knowledge and learning ability.

## CONCLUSION

Both Bourdieu's theory of class symbolization and the Frankfurt school's theory of mass reification validly describe a part of late capitalist culture. But neither grasps its totality because both fail to conceptualize the dynamic factor that mediates the relation of class to culture—class struggle. Because of Bourdieu's rather ahistorical view of class and its cultural legitimation, he does not fully conceptualize the cultural changes wrought by the transition to capitalism. Theorists of the Frankfurt school are more attuned to the dynamic of capitalist class relations and better understand the progressive reification of culture. But their neglect of the contingent, historical factors mediating the impact of class relations on culture leads them to ignore the limits of mass reification. The totality of late capitalist culture may be grasped only by conceptualizing culture as a historically grounded human praxis, an intervention in class struggle that may either reproduce or revolutionize existing class structures.

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# Interaction and Asymmetry in Clinical Discourse<sup>1</sup>

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This article investigates the way in which physicians or clinicians apparently advance their professional dominance by ignoring life-world concerns of the patients or clients they see. Usual analyses of this phenomenon invoke conceptions of authority to explain it implicitly, or they propose that the asymmetry of clinical discourse relies solely on an institutional basis. In order to discover and analyze interactional aspects of the clinical encounter, comparative studies between institutional and everyday contexts are necessary. This article demonstrates that, through the use of a conversational "perspective display series," which is adapted to the clinical environment, a delivery of "bad" diagnosis news can complicate the patient's perspective and promote understanding and the appearance of agreement between clinician and patient. In general, describing manifestations of institutional power and authority should include analysis of the ways that participants organize interaction in the first place.

Studies of the doctor-patient relationship uniformly describe an asymmetry of knowledge and authority that allows doctors to promulgate a biomedical model of disease and to simultaneously undermine patients' own experience and understanding. Parsons's (1951) classic study of the doctor-patient relationship, in highlighting the importance of physician control over illness-as-deviance, suggested that asymmetry is functionally necessary to a homeostatic society. Many critics have scored Parsons for overemphasizing the passivity of patients, for ignoring the inherently conflictual situation of doctor-patient interaction, for neglecting broader sociopolitical structures in which the institution of medicine is embedded, and for other shortcomings, but all seem to agree that physicians have

<sup>1</sup> An early version of this paper was presented at the Conference on Talk and Social Structure, University of California, Santa Barbara, March 1986. Later drafts, including the present version, benefited immeasurably from copious oral and written comments by Deirdre Boden, Steven Clayman, Warren Hagstrom, John Heritage, Emanuel Schegloff, and Paul ten Have.

the power to disseminate medical expertise against and at the expense of lay forms of understanding.<sup>2</sup>

This paper examines communication in one kind of doctor-patient relationship, and its purposes are both substantive and methodological. I argue that asymmetry in the medical interview is not totally a product of the physician's abstract power. Rather than simply being imposed, in other words, asymmetry is interactively achieved. The interactional achievement of social structural features is a core idea in ethnomethodologically derived theorizing and research (Cicourel 1973; Molotch and Boden 1985; Zimmerman and Boden 1991) but, beyond this, I will show that doctor-patient interaction involves *sequences of talk* that have their home in ordinary conversation. Even though the physician's biomedical model takes precedence over patients' own knowledge and understanding of illness, other features of the interaction may be similar to mundane conversational situations. In particular, some clinical deliveries of diagnostic news are similar to how, in ordinary talk, parties organize concertedly to allow one's information and perspective to be expressed seriatim or as the sequel to the other's own displayed view and knowledge. If, at the level of conversational sequencing, we find deep connections between everyday life and the medical encounter, implications for the sociological understanding of clinical and other institutional discourses are vast. Methodologically, it means that strategies of questioning and informing in institutional discourse need to be investigated in relation to the structure of ordinary talk, especially its sequential organization. Theoretically, this may show that asymmetry and other features of clinical discourse, rather than flowing solely from the imposition of institutional authority, derive partly from participants' indigenous resolution of interactive problems that transcend the doctor-patient dialogue.

The paper begins by showing a phenomenon of asymmetry—the promotion of the biomedical model as opposed to lay experience and understandings—in one type of medical encounter. Next is a review of various conventional explanations for the phenomenon, followed by an analysis of a *perspective-display series* (PDS) that conversationalists employ in trading information and opinions on ordinary social objects. This organized series of turns is adapted for use in clinical discourse, and I analyze how it operates for the delivery of diagnostic news. Finally, this permits detailed comparison of doctor-patient communication and ordinary interaction, which, in general, leads to fuller sociological understanding of the prominent features of institutional discourse.

<sup>2</sup> The literature on doctor-patient interaction is vast. Particularly useful reviews can be found in Anspach (1988), Bloom and Wilson (1979), Fisher (1986), Jensen (1986), Mishler (1984, chap. 2), West (1984b, chap. 2), and West and Frankel (1991). On the particular topic of asymmetry, see Heath (in press) and ten Have (1991).

## THE DATA AND PHENOMENON FOR STUDY

The data for this study differ slightly from the prototype (but see Parsons 1951, pp. 446–47). The patients are children who have been referred to a clinic for developmental disabilities. This clinic performs diagnostic services, such as giving neurological, psychological, and intelligence examinations. Pediatricians, social workers, educational psychologists, speech pathologists, psychiatrists, and other professionals may all view the child and family. When the clinicians have completed their examinations and have arrived at a diagnosis, they must present it not to the child, but to the child's representatives or agents, the parents (cf. Silverman 1981; Strong 1979). This is done during an "informing interview." The complete corpus of data includes over 50 such interviews between clinicians and parents.<sup>3</sup>

The phenomenon of analytic interest, in general terms, is the apparent suppression of patient or client experience in favor of a clinical perspective. The prototypical example is of a patient who arrives at a doctor's office and presents a complaint. The doctor, largely by way of questioning strategies that require delimited responses, works the complaint into biomedical categories that lack sensitivity to the patient's psychosocial concerns, life world, and folk understandings. In my data, the phenomenon of asymmetry takes the form of clinicians' suppressing parental experience related to their children's symptoms rather than the parents' own. To fully display the phenomenon, I will examine a single interview wherein a pediatrician asks the parents how they see their child, listens to their responses, and proceeds to deliver clinical information in a way that seems to deal marginally with the concerns and opinions the parents expressed in answering her initial question. Scrutiny of the entire corpus of data reveals that this is a characteristic and not idiosyncratic phenomenon, most especially and paradoxically when clinicians directly ask parents for their view of the child being diagnosed.

The opening portion of a single interview is being used as a vehicle for this discussion (see "Transcript of Informing Interview" in the Appendix). Later analyses are based on all instances in the corpus. The transcript in the Appendix can be loosely divided into three sections, which will later be identified as corresponding to parts of a "perspective-display series." The pediatrician ("Dr" on the transcript) asks the parents (lines 2–3) how they "see" J, their daughter, "at this time." The

<sup>3</sup> The data were collected under grant HD 01799 from the National Institutes of Health, Stephan A. Richardson, principal investigator, and grant HD 17803-02, Douglas W. Maynard, principal investigator. Bonnie Svarstad, who worked on the former grant with Helen Levens Lipton, with permission generously made the Richardson data available to me.



parents ("Mo" and "Fa" on the transcript) then present their view of J (lines 4–121). Finally, the pediatrician presents the clinical diagnosis (lines 122–56). Starting at line 123, she reports on the "psychological testing" and tells the parents that J's intelligence is normal, but that she has "a very specific problem with language" (lines 144, 147).

I start with a traditional format for analyzing this transcript (which comprises the overwhelming bulk of the informing interview), characterizing it ethnographically by breaking it down further into 13 question-initiated segments. I identify these segments according to a three-part unit that Mishler (1984) and others describe as relevant to doctor-patient interaction: (1) question, (2) reply, (3) response. The first segment contains the pediatrician's global query ("How do you see J at this time?"). The parents reply by referring to J's speech and pronunciation difficulties. In subsequent segments, the doctor probes the parents for further displays of their perspective, and a variety of topics concerning the child emerge. In table 1, I list the 13 segments and their questions, replies, and responses. Between the parents' replies and the doctor's responses, I interpose ethnographic, summary "glosses" of the parents' replies, describing their comments as "diagnoses," "theories," "evidence," and so on. The interest here is in how, after the clinician asks the parents for their view of J, and after they display their views, she then responds to these displays.

Briefly, of all the things the parents produce, only a few are consequential to the clinician's responses. Thus, the pediatrician does take up the parents' concern about J being unclear and perhaps underdeveloped in speech (see segment 3 in table 1) by probing them further (segment 4). She similarly deals with the mother's diagnosis of "not normal" by asking for examples (segments 5, 6). Slightly later, the doctor attends to a quoted characterization of things taking "longer" for J to "learn" by asking "why" this might be (segments 7, 8). Next, after Mrs. C, the mother, replies that others have suggested J is retarded (segment 8), the clinician asks if this is her own worry (segments 9, 10). Mrs. C disconfirms this by saying J is "just slow in learning" (segment 10), and then the pediatrician, querying about the extent of the slowness (segments 11 and 12), pursues this topic. Notice that when the doctor (Dr. S) moves to present clinical findings and diagnoses (starting at line 123 in the Appendix), she states that J is "at the lower end . . . of normal intelligence" (line 127) and that she "does not appear to be a retarded child" (line 130). It seems, therefore, that her probing in regard to J's speech difficulty and its causes enables the clinician to see what the parents' position is and to deliver clinical findings that confirm the parents' sense that the child is just "slow" and not "retarded."

If the pediatrician does speak to the parents' concern about J's speech

TABLE 1

## SUMMARY OF DOCTOR-PATIENT INFORMING INTERVIEW

| Segment | Doctor's Question   | Parent's Reply  | Reply Gloss  | Doctor's Response  |
|---------|---|---|--|--|
| 1       | Now that you've-we've been through all this I'd just like to know from YOU how you see J at this time (lines 2-3) | The same, she can't talk, she can't speak . . . clearly, she can't pronounce words (lines 5, 9-14)  | <i>Parent's diagnosis:</i> J has a talking or speaking problem                   | "Mm h" (line 18)   |
| 2       | (refer to question above)   | She talk like the other kids, like babies, she try to imitate them so maybe she attract more attention, so she tries to act the same way you know (lines 19, 22, 26-30, 32) | <i>Father's theory:</i> J tries to attract attention by acting like a baby       | Minimal utterances ("mm hmm"), silences (lines 21, 24-25, 31, 33), and then question about other children's ages (line 34) |
| 3       | Does the 3-year-old talk better than J? (lines 39, 41)  | Yes, clearer (lines 42-44)  | <i>Parent's diagnosis:</i> J's language development is behind                    | Probing question about how J was earlier "progressing" (lines 47-50)   |
| 4       | When J was little, she still wasn't progressing the way she should? (lines 47-50)                                 | No, she use to do things that weren't normal at all (lines 49, 51)  | <i>Parent's diagnosis of earlier behavior:</i> not normal                        | Asks for examples (line 53)  |
| 5       | Like what? (line 53)  | She use to lick the floor when we used to tell her not to do that (lines 54-5)  | <i>Mother's complaint:</i> licking the floor                                     | Minimal utterance ("mm hmm," line 56)  |
| 6       | (refer to question above)   | My mother . . . use to say it use ta take longer with her to learn things   | <i>Mother's report of her mother's diagnosis:</i> takes J longer to learn things | Query as to why (line 63, in overlap with father)  |
| 7       | Why do you think that this is? (line 63)  | Were told that she was spoiled by her grandmother (line 68 ff.)   | <i>Father's report of grandmother's theory:</i> J was spoiled.                   | Dr's response: None  |

|    |  |  |   |  |
|----|--|--|---|--|
| 8  | (refer to question above)  | Took her to friend's house and she's a nurse and she told me that girl don't look like she's normal, and everybody used to tell me the same thing like she was retarded or something (lines 69-72) | <i>Mother's report of other people's offered diagnoses:</i> I is not normal, J is retarded. (This disagrees with father's report above) | Queries as to whether the retardation issue is a worry (lines 73-74)   |
| 9  | Is this something that you were worried about, that she might be retarded, and that might be the reason for the language problem? (lines 73-4)                 | I can't worry about it, I have to live with that, I can't worry (lines 76-79)  | <i>Father's denial of worry</i>   | Restates her question as to whether they think that retardation might be the reason for the talking problem (lines 81-83)                    |
| 10 | Is this [retardation] something in the back of your mind, that maybe that was the reason why she isn't talking? (lines 81-83)                                  | (Mother:) I don't think so, I think she just slow in learning (line 85) (Father affiliates with this, line 87)   | <i>Mother's diagnosis:</i> slow in learning   | Queries as to whether this is in everything or just some things (lines 88-90)  |
| 11 | Is she slow in learning everything or there's some things she can learn very quickly, pick up on? (lines 88-90)  | (Mother:) Yes, she watches Sesame Street and she knows some of the ABC's, and to count, she doesn't know how to count (lines 94-97). (Father:) What if she might be absent minded? (line 98)       | <i>Mother's evidence for her diagnosis:</i> knows some ABC's but not how to count; <i>Father's theory:</i> absentmindedness             | Ignores father by interrupting him, queries about the 2-year-old   |
| 12 | And the 2-year-old? (line 99)  | He's smarter than her  | <i>Mother's evidence for her diagnosis:</i> comparison to brother   | Minimal: asks about other activities   |
| 13 | What about doing things like helping you around the house, setting the table, or dusting? (lines 104-7) Playing with blocks or crayons on the wall? (line 112) | (Mother:) No, she doesn't play with that she breaks them (lines 108, 111, 113, 115). (Father:) She plays with crayons on the wall (line 114)   | <i>Mother's and father's complaints:</i> she doesn't help, she breaks things, she colors on the wall                                    | Queries about whether she does not use crayons on paper (line 118), and then moves to deliver clinical findings and diagnoses (lines 123-56) |

development, she does not actively pursue or sometimes even acknowledge a number of other matters. These include the parents' diagnosis that J cannot talk or speak clearly (segment 1),<sup>4</sup> their complaints about J's behavior, such as licking the floor (segment 5), breaking things, and coloring on the wall (segment 13), and the father's theories regarding how J tries to attract attention (segment 2) or might be absentminded (segment 11). Other matters that appear inconsequential for the clinician, at least in the talk here, are at a slightly more complex level because they are embedded in discussions of other things rather than themselves being a focus. These matters include how the grandmother(s) (segments 6 and 7), Mrs. C's friend, and "everybody" (segment 8) react to J, and the possibly troubled relations between the parents and these others that such reactions may produce or exhibit. There is also each parent's own view; the two may not be of one mind regarding J's problems. The father seems to theorize that J is a malingerer (segments 2, 7, and 11), while the mother, who offers more concrete observations regarding J's development and behavior, never affiliates with the theoretical viewpoint of the father. In fact, as the parents answer Dr. S's questions, at one point (segments 7, 8) there is an apparent display of disagreement. The father suggests that J is spoiled, while the mother offers that she is "not normal" and reports others' opinions that she is retarded.

### Conventional Explanations of Asymmetry

During conferences or examinations, in general, doctors may ask patients (or their representatives) for their view of a problem or illness and yet disregard much of what then gets said. Discrepancies between patients' or parents' perspectives and those of clinicians or practitioners, together with the triumph of a biomedical model, are documented throughout medical sociology. For sake of simplicity, I will collapse conventional explanations of the asymmetry phenomenon into three types, ranging from the "macro" to the "micro" level, making brief references to works that may overlap, and whose complexities cannot receive justice here. It is the remarkable consistency of extant studies that I wish to highlight through the following discussion.

<sup>4</sup> Later, the clinician clearly states that J has a problem with "language," which to her at least is different from the parents' reference to J's talking and speaking difficulties. At the end of the interview, when it is clear that the parents do not understand the distinction, Dr. S explains, "Language are [*sic*] the actual words. Speech is how the words sound. Okay? J's speech is a very secondary consideration. It's the language which is her problem. When language goes into her brain, it gets garbled up, and doesn't make sense. . . . It has something to do with the parts of her brain that control speech, that control language, and it doesn't work."

*Professional authority.*—Lay persons may confront communication difficulties with doctors because the latter have command of cultural authority through which they “judge the experience and needs of clients” and construct medical reality (Starr 1982, p. 13). Such authority derives in part from the development, in the last century, of sophisticated diagnostic technology, concomitant specialization, and peer-validated professional competence. Although being more historically sensitive, Starr (1982) nevertheless reinforces Parsons’s (1951) original statement that professional authority is based on access to those valued goods and services that patients need. It also accords with Freidson (1970) who, unlike Parsons, emphasizes conflict between patients and doctors but who sees its resolution as flowing from this same feature of the doctor-patient relationship. That is, patients acquiesce to the physician’s perspective and advice, whether they agree with it or not, because of the physician’s gatekeeping monopoly over such matters as therapy, surgery, prescriptions, insurance, and sick leave (Freidson 1970, pp. 116–17).

*Sociopolitical structures.*—From a more critical perspective, the phenomenon of asymmetry in the medical interview is not just a matter of professional authority. Rather, it is an aspect of medicine’s place in the exploitative class relations characteristic of contemporary capitalism (Navarro 1976). The discourse of the medical interview reproduces patterns of domination and subordination by legitimating class relationships, administering information, and using science as a mode of ideology to obfuscate exploitation (Waitzkin 1979; Waitzkin and Stoeckle 1976). For example, doctors reinforce oppressive arrangements in work, family, recreational, and other aspects of social life (Waitzkin 1983, p. 180) and help to individualize the origins of social problems (see Conrad and Schneider 1980).

In this view, physicians are agents of social control, operating on behalf of the capitalist class. In a different critical analysis, Foucault (1972) argues that physicians are, as much as the patients they treat, subject to the control of discursive formations or anonymous “unities” that operate on all individuals who speak within a given field (see Dreyfus and Rabinow 1982, p. 61). The asymmetry in clinical discourse occurs because the technology of domination requires the physician-as-facilitator to awaken even the subjectivity of the patient to be captured by pervasive forms of knowledge and power in which both parties are embedded. “Everything,” say Arney and Bergen (1984, p. 170), “no matter how trivial it might seem, must be noted, recorded, and made the object of analysis.” Moreover, the technologies of monitoring and surveillance are reaching more and more into everyday life (Foucault 1972; Dreyfus and Rabinow 1982, p. 48; Arney and Bergen 1984, p. 166). Thus, instead of physicians acting as agents of institutional arrangements that rob patients

of their lives and autonomy, the distinction between institutional and everyday experience is collapsed as both parties to the medical transaction become tangled in the all-encompassing web of discursive formations.

*Communicational structures.*—Scholarly work that analyzes doctor-patient interaction in terms of authority relationships or of larger sociopolitical structures treats communication, to paraphrase West (1984*b*, p. 34), as a “by-product” of such relationships and structures. By contrast, those who study the communication process argue that it is the very means by which participants enact patterns of authority, distinctions of class, discursive formations, and other institutional features that form the social surround. Thus, through interview and observation, cognitively oriented sociologists and anthropologists have uncovered discrete manifestations of conflict in the medical interview. As patients move from home and community to formal health care systems, Kleinman (1980, p. 99) argues, they develop and employ cognitive value orientations that embody personal and community meanings. In the clinic, patients meet the practitioners of biomedicine who use impersonal, objective, and scientific frameworks, and this results in frequent problems of communication that may even interfere with the adequacy of health care.

The confrontation between divergent values and orientations is resolved, Cicourel (1982, p. 72) suggests, because of patients’ “compliance with the physician’s speech acts” and the resultant transformation of locally based accounts into institutionalized categories of disease (Cicourel 1981; cf. Smith 1987). Indeed, interaction-oriented researchers point to the linguistic and interactive ways in which the phenomenon of asymmetry is exhibited. Doctors ask more questions than patients (Frankel 1989; West 1984*b*), interrupt patients more than the reverse (West 1984*a*, 1984*b*), control topical development (Beckman and Frankel 1984; K. Davis 1988), define patients in gender-stereotypical terms in such a way as to make unwarranted assumptions about their needs and symptoms (Fisher 1985; Todd 1989), and so on (see also Byrne and Long 1976; Fisher 1984*a*, 1984*b*; Strong 1979; ten Have, 1991.<sup>5</sup> In Mishler’s (1984) analysis, physicians use the “voice of medicine,” which expresses the scientific attitude and insists on technical interests in suppressing patients’ “voice of the lifeworld,” which represents their biographical and real-world concerns (see Silverman and Torode 1980). That is, through

<sup>5</sup> Note that most of these accounts emphasize what physicians “do” to patients, although see West (1984*a*) for an example of how some patients (male) interrupt some physicians (female). In Heath’s (in press) study, asymmetry is embodied in identifiable sequential and interactional mechanisms. For example, after a physician provides an assessment, patients often withhold any reply and thereby contribute to preserving the objective and scientific status of the diagnosis.

the request-response-assessment structure that characterizes the medical interview, physicians decide when patients can take a turn, selectively attend to technically relevant aspects of patients' answers, and ignore the life context of the symptoms patients present. The patient's "voice" is ultimately stifled and silenced as the clinician asserts and reasserts the "dominance and singularity of the clinical perspective" (Mishler 1984, p. 83).

*Summary.*—The present study is continuous with other microanalytic research in arguing that physician control of the medical interview, although predictable, is no automatic effect of institutional pressures (ten Have 1991). Parties to the interview constitute and enact the asymmetry in clinical discourse and thereby produce and reproduce the features of social structure (e.g., Cicourel 1973; Zimmerman and Boden 1991). Still, because prior cognitive and linguistic studies share an assumption with studies of the authority, sociopolitics, and discursive formations of medicine, there is an avenue of departure in the present research. That is, macro-level and mid-level theorizing about doctor-patient interaction, with its emphasis on professional authority and sociopolitics, proposes either a radical disjunction between everyday life and clinical discourse, or else sees discourse as coming to supplant everyday language. Similarly, microanalytic theory and research, as ten Have (1991) has pointed out, assume a model of symmetrical interaction in ordinary conversation and document an almost absolute imbalance of control and authority in the communicational structures of medical discourse. It is as if there is no room and no time in the medical interview for accomplishing other features, particularly those that are characteristic of ordinary talk as an interactional domain organized independently of institutions and discursive formations that could subsume it. In short, along with their macro-level counterparts, microanalytic investigations of clinics, in concentrating on ways in which participants "do the institution," may have neglected how they "do the interaction."

It is not that conventional accounts of the phenomenon are wrong. Rather, they pose an external basis for ordinary features of interaction that are endogenously produced in the very details of concerted behavior (Garfinkel 1988). Stated differently, premature invocation of the institutional order to explain face-to-face phenomena can obviate an appreciation of that social organization which occurs as an indigenous and real-time accomplishment of participants using the procedures of talk-in-interaction (Schegloff 1987). Even in clinical or other institutional discourses, there is an interactional order whose operation is relatively independent of the social surround as it is theoretically or abstractly characterized. To understand what is occurring interactionally in discourse, and as one means for gaining access to what might be the primor-

dial sites for the analysis of structures of everyday life, comparative studies are required.<sup>6</sup> Moreover, by first exploring the interactional basis of institutional discourse, it may be possible to better explicate just how power and authority are manifested within it.<sup>7</sup>

#### THE PERSPECTIVE-DISPLAY SERIES IN ORDINARY CONVERSATION

In ordinary conversation, as in clinical discourse, when one party has an opinion or assessment to give, there are different strategies for doing so. One strategy, sometimes warranted by current participation in an assessable event, other times by narrating past participation in such an event, is to *offer* an opinion (Pomerantz 1984a). The perspective-display series (hereafter, PDS) is another strategy; through it, one party solicits another party's opinion and then produces a report or assessment in a way that takes the other's into account.<sup>8</sup> It appears that such reports can be like "news announcements," operating as topical talk and providing for at least some "receipt" of the report or possibly a "topicalizer" in the next turn (Button and Casey 1985, p. 25). However, the key feature of a PDS is that the report is preceded by the recipient's solicited display of perspective. In excerpt 1, turn (1) is an opinion query or perspective-display invitation, (2) the reply, (3) the asker's own report. Subsequent to the third-turn report, Al provides (4), topicalizers (lines 6, 9), that occasion Bob's elaboration on the report (lines 7–8, 10–11; excerpts have identifying transcript locations in parentheses).

<sup>6</sup> For general statements on this point, see Heritage (1984), Schegloff (1980), and Zimmerman and Boden (1991) and for previous comparative empirical work, see Atkinson and Drew (1979), Clayman (1989), Heritage and Greatbatch (1991), ten Have (1989), and Whalen and Zimmerman (1987).

<sup>7</sup> In what follows, I distinguish two arenas of linguistic interaction by referring to (a) talk in everyday settings as "conversation" and (b) that in institutional settings as "discourse." While this distinction is rough, it is a useful heuristic for pointing the way toward an empirically grounded, technical specification of the structure of talk in institutional settings. For a lucid discussion of the difficulties of separating ordinary talk from discourse in a scientific laboratory, see Lynch (1985, chap. 5).

<sup>8</sup> The perspective-display series has been explored at length in both clinical discourse (Maynard, 1991b, in press) and ordinary conversation (Maynard 1989a). Here, I present results in summary fashion and simply assert some things that have been established analytically in the other papers. Rather than make reference to these other papers on a point-by-point basis, I would ask readers to consult these other papers for explication of any particular assertions that receive only brief attention here. These other papers analyze all instances of the perspective-display series in several collections of data.



## Excerpt 1 (22/2.275)

- 1 → 1. Bob: Have you ever heard anything about wire wheels?  
 2 → 2. Al: They can be a real pain. They you know they go outta line  
 3. and—  
 3 → 4. Bob: Yeah the— if ya get a flat you hafta take it to a special  
 → 5. place ta get the flat repaired.  
 4 → 6. Al: Uh— why's that?  
 7. Bob: 'Cause um they're really easy to break. I mean to bend and  
 8. damage.  
 → 9. Al: Oh really?  
 10. Bob: An' (.) mos' people won' touch 'em unless they 'ave the special  
 11. you know equipment or they— they have the know how  
 12. Al: They're like about two hundred bucks apiece or something too.  
 14. Bob: Yeah, ya get 'em— you get 'em chromed and that's the only way  
 15. to have 'em just about too you know  
 16. Al: heh Yeah

The first two turns are similar to what Sacks (1966) has called a presequence. Presequences include the summons-answer type, by which participants provide for coordinated entry into a conversation (Schegloff 1968); preinvitations ("Are you busy Friday night?"), by which a speaker can determine whether to solicit someone's coparticipation in a social activity (Sacks 1966); preannouncements ("Have you heard?"), through which a speaker can discover whether some news to be told is already known by a recipient (Terasaki 1976). Depending on what a speaker finds out by initiating a presequence, the conversation, invitation, or announcement may or may not ensue. Here, as with presequences in general, the perspective-display invitation and its reply seem to have alternative trajectories. Sometimes, the reply to a perspective-display invitation will be followed by further questions or other topicalizers that permit the recipient to talk at length on some topic. The questioner, never announcing any independent information or perspective, appears to "interview" a recipient and provide for that person to do extended topical talk. At other times, as in the above example, the asker follows a reply with his own report or with further questions and then with his report.<sup>9</sup> We will return to these points; for now, I will refer to the PDS

<sup>9</sup> To be technically clear: in terms of the organization of sequences, the first two turns of the perspective-display series comprise a presequence (as noted). The third-turn report of the PDS is akin to a "news announcement" (Button and Casey 1985), providing for at least some "receipt" of the report or possibly a "topicalizer" in the next turn; this occasions elaboration of the topic. Thus, turn three of the PDS is turn one of a news announcement sequence, the latter being prefaced by a presequence.

| perspective-display series | sequential organization       |
|----------------------------|-------------------------------|
| turn 1 (PD invitation)     | presequence turn 1 (question) |
| turn 2 (reply)             | presequence turn 2 (answer)   |
| turn 3 (report)            | topical turn 1 (announcement) |
| turn 4 (topicalizer)       | topical turn 2 (topicalizer)  |

After the topicalizer, a speaker can elaborate on the report or announcement.

as consisting of the first three turns listed above. The interrelations among these turns are the focus of my analysis.

A search through a variety of conversational collections turned up fewer instances of this series among *acquainted* than among *unacquainted* parties. It may be that the circuitous way in which the PDS allows arrival at a third-turn "report" is an inherently cautious maneuver that makes the series particularly adaptable to environments of professional-lay interaction, conversations among unacquainted parties, and so on. One issue with which the PDS seems to deal is the knowledge or understanding that the potential recipient of a report can be expected to show. Notice in excerpt 1 that Bob's initial query, asking Al whether he "has heard anything about wire wheels," is formatted as an inquiry into Al's knowledge base. More than that, the series enables a speaker to discover how a mentionable report or opinion will fit with recipient's attitude; if the fit is good, the speaker can anticipate that the report will occasion a display of affiliation. Thus, after Al's assessment that wire wheels "can be a real pain," and the start of a listing that would warrant such an opinion, Bob's report continues the listing and seems consistent with the assessment. Then, subsequent to Bob's elaboration, Al produces what is hearable as a complaint about the price of wire wheels (line 12) and thus aligns with the negative assessments so far proffered. In general, the PDS allows a report to be delivered in a hospitable environment and in a way that *coimplicates* the recipient's perspective.

### Marked and Unmarked Queries

The first turn in the series, consisting of an invitation or opinion query, elicits in the second turn an assessment from the coparticipant. Assessments can consist of (a) praising and complimenting terms, (b) complaints and expressions of concern, and so on. Perspective-display invitations may exhibit an expectation that the subsequent assessment will be positive or negative (cf. Sacks 1987, p. 57). Thusly, they are questions of the type that Pomerantz (1988) has called "offering a candidate answer," providing a speaker's "best guess" as to what recipient will reply. For instance, some invitations are marked to expect a complimentary assessment:

Excerpt 2 (13/9.208)

- Carrie: Ya like it up here though?  
Abby: Yeah! I really do.

Excerpt 3 (9/20.88)

- Sharon: Do you— um LIKE the dorms?  
Sheila: Yeah. I like them pretty much.

Excerpt 4 (16/8.52)

- Alice: San Rafael's— is that really nice? I mean,
- Jane: Uh huh
- Alice: do you really like living there?
- Jane: Yeah I lived in Santa Cruz last year.

Thus, elicited positive assessments may simply ratify what is proposed in a marked perspective-display invitation. Compared with positively marked queries, negatively marked ones are rare. They become warranted because of previous topical talk:

Excerpt 5 (19/8.180)

- 1. Alice: What sports do you pLAY?
- 2. Jane: Well that was BASKetball. But I quit.
- 3. Alice: Oh. Oh yeah? Didn't like it?
- 4. Jane: Uh— I didn' like the coach.

Alice's announcement (line 2) that she quit basketball provides for the relevance of an account, which is elicited through a negatively framed perspective-display invitation at line 3. Besides positively and negatively marked queries, others are unmarked or neutral in terms of explicit expectation. Excerpt 6 is an instance:

Excerpt 6 (2/15.92)

- John: So what do you think about the bicycles on campus?
- Judy: I think they're terrible.
- John: Sure is about a MILLION of 'em.
- Judy: eh heh

Note here that the neutral invitation does obtain a complaint or negative assessment as a reply. The rarity of negatively marked opinion queries and the use of immediate conversational contexts for warranting them suggest that eliciting a negative assessment is problematic in a way that eliciting a positive assessment is not.<sup>10</sup> Use of the neutral query, therefore, may be a way to occasion the display of a negative assessment without doing so officially. In any case, parties infrequently show an expectation that someone else has a negative opinion and are not so reluctant in regard to positive opinions.

### The Preference for Agreement and the Use of "Probes"

No matter which kind of utterance starts it off, the PDS represents a cautious way of putting reports, opinions, and assessments on the floor.

<sup>10</sup> Evidence for the delicacy of producing negative assessments can be seen in Button and Casey's (1985, p. 38) discussion of topical talk. Conversing with another, one party who has "adverse comments" about a mutual friend can manage talk such that these comments are requested by the other rather than volunteered.

This caution may relate to the preference for agreement in conversation, which concerns structured or institutionalized aspects of conversational activities, not the coparticipants' attitudes or psychologies (see Heritage 1984, p. 267; Schegloff 1988). For instance, Pomerantz (1984*a*) has shown that following one party's production of an assessment, another party will produce a "second" assessment in different ways depending on whether it agrees or disagrees with the first. Agreements are done immediately (with no preceding silence or prefacing talk), are stated forthrightly, and occupy entire turns, while disagreements are delayed through pauses and prefaces (including agreement components), are mitigated, and usually form only part of a full turn of talk.

Participants may enact a preference for agreement through the PDS in several ways. For one, if an asker potentially disagrees with what the recipient says, it provides the asker with the option of withholding any then-and-there display of disagreement. This can be inferred from the organization of presequences. That is, as precedent to some focal activity to which they relate, presequences elicit material that is relevant to deciding whether to pursue the focal activity. Hypothetically, by asking another's opinion, and discovering that opinion to disagree with one's own, one can omit producing a third-turn report. Furthermore, when the recipient of an invitation gives neutral or even resistive replies, these replies can nonetheless be exploited to suggest affiliation between the two parties' perspectives. In one example, a woman, Bev, asks her friend Lyn what she "thinks" about a mutual acquaintance who is "getting all this publicity" in the local newspaper. While Lyn avoids giving a direct opinion, and shows other signs of resistance to an analyzable trajectory in Bev's talk, Bev nonetheless suggests, in her third-turn report, that her recipient "picked up" (and thus understands or possibly even approves of) her own concern about the acquaintance (Maynard 1989*a*, pp. 101–3). Relative to her own position, Bev thus "reads" her recipient's neutral replies in an affirmative fashion. Finally, if an asker does discover a perspective on the part of a recipient with which a third-turn report will disagree, the display of disagreement is mitigated:

Excerpt 7 (8.33)

- 1 → 1. Jane: How da ya like the class
- 2 → 2. Alice: Um tch I don't know, it's like— I like his lectures an' stuff
- 3. but— you know, sometimes I can get into 'em but like— you
- 4. know some of the things I have difficulty relating. You know?
5. Jane: Yeah?
- 6. Alice: Like you know, jus' the stuff about— like the George Herbert
- 7. Mead jazz an' stuff an'
8. Jane: The what?
9. Alice: The George Herbert Mead stuff?
10. Jane: Oh Mead

11. Alice: And— yeah.
- 3 → 12. Jane: Yeah I don't know, I— I can get IN that pretty much.
13. Alice: Um, I don't know heh
14. Jane: So what's your name?

Here, Alice starts her answer to the opinion query with a disclaimer of knowledge (“I don’t know,” line 2). Jane uses the same disclaimer to precede and thereby delay her report (line 12), and Alice repeats the disclaimer as a receipt of that report (line 13). In short, the parties collaborate in avoiding the stark display of disagreement that their contrastive positions imply (note that at line 14, Jane introduces a topic change).

The preference for agreement, then, shows up in the way that participants handle potential and actual disparities of opinion. On the other hand, if an asker’s report in any way fits favorably with a recipient’s displayed perspective, then the asker regularly expresses agreement (with a “yeah” token) and/or produces the report immediately (see excerpt 1 above). One last matter is that if a recipient’s answer is ambiguous or not clearly in agreement or disagreement with what a speaker has to say, then the speaker can *probe* the recipient to obtain material with which agreement can be fashioned. In the next example, after an initial opinion query (line 5) and its ambiguous answer (line 6),<sup>11</sup> the inviter proposes an assessment (line 7; arrowed with a “P” for “probe”), and then follows the reply (line 8; arrowed with a “PR” for “probe reply”) with an announcement (lines 9, 11) for which the elicited evaluation stands as an account. Thus, Lisa ends up agreeing with Jenny’s assessment.

Excerpt 8 (1/11.173)

1. Lisa: Is this your first year here?
2. Jenny: Mm hmm. Yeah.
3. Lisa: Did you go to J.C.?
4. Jenny: No, I went to San Diego State
- 1 → 5. Lisa: Oh. Ya like it?
- 2 → 6. Jenny: Hm un.
- P → 7. Lisa: You di—it was a lot Easier than here wasn't it?
- PR → 8. Jenny: So much easier.
- 3 → 9. Lisa: Yeah, god I have some friends down there. gahhh!
10. Jenny: It's so much easier
- 11. Lisa: They NEVER STUDY! I'm jealous heh heh! ehh
12. Jenny: Um hmm

And in excerpt 9, after Carrie’s marked invitation about liking it “here” (line 1) and Abby’s affirmative reply (line 2), Carrie asks her recipient to account for being “here” (line 3) and finds that the answer (line 4) is one that she can approve (line 5) and with which she can affiliate (line 7).

<sup>11</sup> “Hm un,” like the “nyems” that Jefferson (1978) has described, would seem to allow differing interpretations on the part of a hearer.

Excerpt 9 (13/9.208)

- 1 → 1. Carrie: Ya like it up here though?  
2 → 2. Abby: Yeah! I really do. It's different, I mean.  
P → 3. Carrie: How did you decide to come here?  
PR → 4. Abby: The area. Just, you know, cause it's Santa Barbara.  
3 → 5. Carrie: Mm that's good.  
6. Abby: That oughta be it. hunh  
→ 7. Carrie: It's why I did t— well, yeah, it's why I came up here too.

These secondary queries appear to follow equivocal or minimal replies to perspective-display invitations. In excerpt 8, Jenny's "hm un" is minimal and its ambiguity or equivocality is evidenced in Lisa's abandoned utterance, which may have been requesting repair ("you di—", line 7). In excerpt 9, Abby at first confirms the proposal in Carrie's query ("Yeah!" line 2), intensifies it ("I really do"), but then equivocates by producing a qualification ("It's different, I mean"). This latter, representing a move from a clearly positive term to a more neutral one, downgrades her initial position.

While the probes could simply be asking for a more extended and/or less ambiguous reply from a recipient, there is clearly more to it than that. The additional material that inviters seek seems related to their own positions, as revealed in the report that is ultimately produced. That is, in excerpt 8, Lisa follows Jenny's reply with a marked query proposing San Diego State as "easier," with the consequence that the subsequent description of her friends who "never study" fits with that proposal as well as with the affirmative reply it receives. In excerpt 9, following Abby's response to Carrie's solicitation of an account for her being at the local college, Carrie strongly expresses approval of the reason offered and pronounces it as her own motive. Thus, if inviters have reports that potentially agree with a position of a coparticipant's, they may first elicit the precise material—some qualification, specification, or explanation of recipient's assessment—such that their subsequent reports can exhibit close accord with what the recipient says.

### Coimplicating Recipients' Perspective in the Third-Turn Report

The PDS is a device by which one party can produce a report or opinion after first soliciting a recipient's perspective. The PDS can be expanded through use of the probe, a secondary query that prefigures the asker's subsequent report and occasions a more precise display of recipient's position. Agreement and other exhibits of affiliation between recipient's and asker's displayed positions are preferred features of the device's use. As a result of this organization, the perspective-display invitation and the prompts that may follow it operate in a dual fashion. Because an

asker's report occurs subsequent to a recipient's assessment, and proposedly affiliates with that perspective, the report *seconds* or *confirms* the recipient's position. Additionally, in that the query, probe(s), and report seem to enact an opinion-based conversational trajectory of asker's own, and in that they solicit material that facilitates the trajectory, the series confirms a recipient's perspective *in relation to the inviter's own*. In a sense, the recipient's position is exploited to reinforce or affirm the position in the inviter's report. In proposing affiliation with a coparticipant's perspective, the asker embeds that perspective as a constituent feature of the report and of the asker's own assessment, which that report adumbrates. All of this suggests that the recipient's position becomes *coimplied* in the asker's report.

So far, excerpts have been from conversations between unacquainted parties. Acquainted parties, through the PDS, show similar interactional sensibilities in their encounters. One example was briefly summarized earlier; the following example is from Pomerantz (1984*b*, pp. 621–22), and occurs when a mother and father are visiting their son and his wife. Because the son has long hair, the parties may regard the long hair of a mutual friend, John, as analogous to the son's hair (Pomerantz 1984*b*, p. 622). A PDS regarding John's hair is arrowed at lines 5–8.

Excerpt 10 (Pomerantz data, simplified)

1. Mo: Is the uh piece of sculpture one of your friends made for you?
2. So: Yeah. That's John. He cut his hair by the way.
3. Mo: Oh he did?
4. So: Yeh
- 1 → 5. Mo: Do you like it?
- 2 → 6. So: Uh, yeah, he looks—
- 3 → 7. Mo: I heard— uh, I read two or three columns and I hear it over TV
- 8. that it's become old— it's becoming passé.
9. Fa: They what?
10. Mo: The longer hair.

A conventional way for the mother to receive the report of John's having cut his hair (line 2), Pomerantz (1984*b*, p. 622) argues, would not be only to mark it as news, as she does at line 3, but to then assess or evaluate the news. Instead, she asks the son for *his* opinion (line 5), which appears positive (line 6), and she then produces a report (lines 7–8) that could imply approval of the haircut. If long hair is “becoming passé,” that is, it would indicate that John, in cutting his hair, has made an appropriate choice.

The mother, as Pomerantz suggests, is being cautious both by asking the son for his view and by displaying a view that officially belongs to others. “The mother, in all likelihood, is quietly unhappy with the son's

long hair and hopes that he will cut it. She seems reluctant to voice views that would be heard as critical of the son's long hair. This includes making comments about other men with long hair. She transmits a view (read in the newspaper and heard on television) that long hair is *passé*. That view, if true, could be a reason for the son to cut his hair" (Pomerantz 1984*b*, pp. 622–23). If the mother is indeed feeling that she would like her son to cut his hair, she manages to convey this without being directly critical of him. Note here a rhetorical or persuasive aspect to the PDS. In any case, well-acquainted parties can use the PDS when their circumstances warrant caution. Where one party has a concern or opinion to express, she can do so by first "testing the waters" for the degree of hospitality that the expression might meet. Then, provided that there is a reasonably close fit with what her own report implies, she can deliver that report in an auspicious environment.

If it is possible to simply and parsimoniously offer a report or opinion in conversation, a reasonable question is why the parties sometimes use the more circuitous PDS. One answer is that the straightforward strategy is more workable for acquainted parties who, as "consociates" (Schutz 1962), already know each other's background knowledge and attitudes. Acquainted parties can therefore gear the display of opinion to such understanding of the other. Still, there may be situations among acquainted persons when, for example, being a "mother" can mean a certain touchiness in regard to commenting on a son's appearance, or when one party has a "concern" about a common friend to convey to another, where the cautiousness of the PDS is appropriate. For unacquainted parties, who do not know their coparticipant's knowledge, beliefs, and opinions, straightforwardly offering a report or opinion might engender various troubles. At the very least, one may say something that the other party does not understand. More problematic is that one might affront the other party and put that party in the position of choosing to remain silently offended or having to perform the dispreferred activity of disagreeing with the first party's assertion. By using the PDS, one can work to deliver a report in a preferred fashion, as in agreement with the recipient's own position on some matter.

The PDS in ordinary conversation, then, represents a cautious way of introducing an opinion or assessment because parties can immediately and in situ gauge the degree of fit between their respective stores of knowledge and positions in regard to some social object. Stated differently, the series allows one party to deliver reports and make assessments of social objects in a way that is sensitive to another party's understanding or perspective and to simultaneously provide for a favorable response to the delivered report. Overall, the PDS permits reports and opinions to be delivered in a way that proposes a mutuality of perspective.



## THE PERSPECTIVE-DISPLAY SERIES IN CLINICAL DISCOURSE

Although bad news is "woven tightly into the fabric of social life" (McClenahan and Lofland 1976), its conveyance is an arduous experience for the bearer and recipient alike. This is especially true in clinical situations where severe illness and death are recurrent topics (Clark and LaBeff 1982; Glaser and Strauss 1965; Maynard, 1991a; Sudnow 1967; Svarstad and Lipton 1977). In clinics, the PDS can be adapted to the delivery of "bad" diagnostic news. Clinicians, rather than presenting a diagnosis straightforwardly, often take the more circuitous route of eliciting the view of their recipients before reporting the clinic's findings.<sup>12</sup> Inbuilt features of the PDS, in particular, its way of setting up a hospitable environment for the telling and its exhibiting the recipient's perspective as an embedded feature of a diagnostic presentation, handle various difficulties of the bad news experience.<sup>13</sup>

## Simple Diagnostic News Deliveries

Delivery of a diagnosis, through use of a PDS, is relatively *simple* or *complex* depending upon the nature of the recipients' elicited perspective in relation to the clinical position. For reasons of space, it is easier to demonstrate the structure of simple deliveries, but it should be kept in mind that complex ones extend the same basic pattern. Every step of diagnostic news delivery that uses the PDS involves coimplicating recipients, such that when some ultimate diagnostic term is produced, it appears as something on which deliverer and recipient converge. Stated differently, the PDS and related mechanisms of delivery involve the participation of recipients, including step-by-step demonstrations of their alignment with the clinical position, so that, in the end, the clinician leads the recipient to the diagnosis in a way that implies a mutuality of perspective.

Simple-form diagnostic presentations involve *confirmations*, through

<sup>12</sup> A detailed comparison of straightforward and circuitous deliveries can be found in Maynard (1991b). Here I concentrate mostly on the circuitous method in which the clinician elicits a recipient's perspective before giving the diagnostic news. As in ordinary conversation, a feature of using the PDS in discourse is that it is a more cautious and less presumptive means of presenting diagnostic information.

<sup>13</sup> Use of the PDS may be related to another conversational phenomenon. A way of handling the difficulties in giving bad news is to arrange a telling so that the recipient rather than the bearer of the news ends up pronouncing it (Schegloff 1988). In general, the deliverer of bad news need not be someone who has completely independent knowledge to convey; instead the deliverer can be someone who is joined in a telling because of the in situ elicitation and display, as a resource for the telling, of what a recipient already knows or believes.

which a clinician displays agreement and offers to modify or reformulate the recipient's displayed view, and then elaborates on the diagnosis. The next excerpt shows the pattern; it begins with a perspective-display invitation (line 1) and a reply (lines 2–4). The third turn of the series takes up at line 8.

Excerpt 11 (8.013)

- 1 → 1. Dr. E: What do you see? as— as his difficulty.
- 2 → 2. Mrs. C: Mainly his uhm— the fact that he doesn't understand  
→ 3. everything and also the fact that his speech is very hard to  
→ 4. understand what he's saying, lots of time
5. Dr. E: Right
6. Dr. E: Do you have any ideas WHY it is? are you— do you?
7. Mrs. C: No
- 3 → 8. Dr. E: Okay I you know I think we BASICALLY in some ways agree with  
→ 9. with you, insofar as we think that D's MAIN problem, you know  
→ 10. DOES involve you know LANGUage,
11. Mrs. C: Mm hmm
12. Dr. E: you know both you know his— being able to underSTAND, and know  
13. what is said to him, and also certainly also to be able to  
14. express, you know his uh thoughts
15. (1.0)
16. Dr. E: Um, in general his development . . .

In her reply to the opinion query, the mother, Mrs. C, formulates her son's problem (lines 2–4), after which Dr. E produces a token of agreement (line 5). Subsequent to a question-answer sequence concerning why there is a problem (lines 6–7), the clinician, although qualifying himself, more fully expresses agreement with Mrs. C's perspective (lines 8–9). Next, he *reformulates* the parent's complaint about D's understanding and speech as involving a "main problem" the child has with "language" (lines 9–10). The reformulation here involves a slight but technically important shift between the mother's reference to understanding and "speech" and the clinician's use of "language." Clinicians regard language as the more fundamental and encompassing deficit, which can be reflected in speech symptoms. Thus, the reformulation may be offering a "correction" that is instructive for the mother's understanding of clinical terminology (see Jefferson 1987). Dr. E also precedes the reformulation with emphasis on the verb "does," which is a way of tying to the recipient's prior assessment and further marking agreement with it. Following Mrs. C's receipt—a "continuer" (line 11; see Schegloff 1982)—Dr. E *elaborates* the diagnosis (lines 12–14), incorporating one term ("understand") that repeats what Mrs. C has said (line 2) and also using another ("express his thoughts") that is a close version of Mrs. C's reference to "speech" (line 3). Thus, a confirmation, reformulation, and

elaboration of the child's condition all occur and, in several ways, coimplicate the recipient's perspective in the diagnostic news.<sup>14</sup>

Rather than being something done simply and declaratively, confirming deliveries are *achievements*. That is, not just anything a parent says will offer the proper environment for a diagnostic news delivery. For instance, in replying to a perspective-display invitation, parents may take a position that there is no problem. Clinicians with bad diagnostic news to deliver are not, then, in a position of being able to agree. Nevertheless, they can elicit or relevantly introduce problem-oriented talk. One way clinicians do this, as I will show later, is to introduce a reason-for-the-clinic-visit statement. Another way is to listen for or encourage talk in which some diagnosable condition or difficulty is eventually broached.

Excerpt 12 (47.001)

1. Dr. E: How's B doing?
2. Mrs. M: Well he's doing uh pretty good you know especially in the school.
3. I explained the teacher what you told me that he might be sent
4. into a special class maybe, that I wasn't sure. And HE says you
5. know I asks his opinion, an' he says that he was doing pretty
6. good in the school, that he was responding you know in uhm
7. everything that he tells them. Now he thinks that he's not gonna
8. need to be sent to another
9. Dr. E: He doesn't think that he's gonna need to be sent
10. Mrs. M: Yeah that he was catching on a little bit uh more you know like
11. I said I— I— I KNOW that he needs a— you know I was 'splaining to
12. her that I'm you know that I know for sure that he needs some
13. special class or something
14. Dr. E: Wu' whatta you think his PROblem is
15. Mrs. M: Speech
16. Dr. E: Yeah. yeah his main problem is a— you know a LANguage problem
17. Mrs. M: Yeah language

The query in line 1 initially obtains a positive assessment from Mrs. M (line 2). However, in the course of reporting a conversation with her son's teacher (lines 3–13), Mrs. M exhibits a position implying that she sees B as having a problem ("I know for sure that he needs some special class or something," lines 12–13). Dr. E immediately follows this with a perspective-display invitation that takes up the implication and returns it to Mrs. M for ratification. Indeed, Mrs. M replies with a formulation of the problem ("speech," line 15). Then, through Dr. E's use of two

<sup>14</sup> After Dr. E's initial elaboration, there appears to be no explicit receipt on the part of the mother, unless she provided some nonvocal response (line 15). Nevertheless, Dr. E progresses to a further elaboration of the diagnosis. As documented by Heath (in press), the silence at line 15 may be typical. Summary assessments or diagnoses in regular medical interviews are often met with silence, after which the physician moves to a related topic.

"yeah" tokens and a reformulation ("language problem," line 16), the delivery of diagnosis occurs as a confirmation, although in suggesting that this is a "main problem" (line 16), the clinician's acceptance of the parent's view is qualified (as in the prior example). Lines 15, 16, and 17 appear similar to the exposed correction sequences that Jefferson (1987) identifies,<sup>15</sup> and this excerpt, like 11, therefore may have an instructive aspect to it. Additionally, the parent in excerpt 12 receives the diagnosis by changing her terminology to match the clinician's (line 17). Subsequently (in talk not reproduced here), Dr. E elaborates the diagnosis using words that further incorporate the recipient's displayed perspective. Overall, then, the way in which the recipient's perspective is coimplicated in the delivery of diagnostic news here is similar to the previous example, with the exception that the clinician must strategically deal with an initial positive assessment on the part of the parent. Thus, the simple type of delivery is an achievement in that it depends on recipients' presenting not just anything in reply to a perspective-display invitation, but just that material which allows agreement and confirmation to be produced and to precede a reformulation and elaboration. When such material is absent, a clinician will work to obtain it.

### Complex Diagnostic News Deliveries

Complex deliveries involving the PDS become so in at least two ways. One is that clinicians may repeatedly probe parents in regard to their view of the child. This is the case with the interview in the Appendix, where the physician asks Mr. and Mrs. C over a dozen times for their concerns and ideas about their daughter J. The pattern is similar to that in ordinary conversation. Following the initial query and reply, the probes elicit more precise displays of the parental perspective, which the doctor can confirm, reformulate, and elaborate upon in presenting clinical information. A second and related way that news deliveries become complex is when, relative to the parent's lay formulation, the clinician presents an upgraded and exhibitedly more serious diagnosis. Analysis of these more extended episodes shows that even when parental and clinical positions are far apart, using the PDS minimizes the potential for conflict. In one interview, for instance, the parents thought their child's

<sup>15</sup> Such correction sequences have the following format (Jefferson 1987, p. 88): "1. A speaker produces some object (X), 2. A subsequent speaker produces an alternative (Y), 3. Prior speaker produces the alternative (Y)." And therefore it seems that part of the clinician's job is to correct lay perspectives. However, the interjection of agreement tokens before the alternative term in excerpt 12, rather than rejecting an initial formulation as in a correction sequence, initially accepts and thus confirms that formulation.

basic problem was hyperactivity, that it was temporary, and that there was no brain damage.<sup>16</sup> The clinical position was that the child's hyperactivity was simply one symptom among many, that the various problems were *not* temporary, and that they were indicative of a more fundamental condition, which was, in fact, brain damage. Through use of a PDS, however, the disparity between perspectives was reduced, and, rather than occurring argumentatively or conflictually, the informing occurred harmoniously and affirmatively.

Thus, after hearing the mother's view, the clinician confirmed that hyperactivity was a problem and then proposed *converting* it to one among several symptoms that were indicative of brain damage. As in excerpts 11 and 12, this had certain corrective and instructive aspects to it. The parent agreed to the clinician's proposal and assented to the existence of the other symptoms, thereby collaborating in an account for the diagnosis of brain damage. This account then figured in the pediatrician's third-turn delivery of the core diagnosis:

Excerpt 13 (30.186)

1. Dr. L: Now when you say: uh you know, the term something wrong with the brain, is very vague, we don't like it, you don't like it.
- 2.
3. Mrs. C: Yeah right.
4. Dr. L: But when we have to describe B's problems, we would have to say that there is something, that is not
- 5.
6. Mrs. C: Yeah.
7. Dr. L: working right in the brain,
8. Mrs. C: Mm
9. Dr. L: that's causing these things. It's causing the hyperactivity, it's
10. Mrs. C: Yeah
11. Dr. L: causing him ta see the world, in a different way, from other children,
- 12.
13. Mrs. C: Mm yeah.
14. Dr. L: It's causing him to be his thoughts to be maybe a little disorganized, when he tries ta order the world,
- 15.
16. Mrs. C: Mm
17. Dr. L: in his mind. And if you know, we had ta say, uh if we had ta give a diagnosis you know when you write away to schools or ta other doctors, you have to write something down as a diagnosis. I feel that hyperactivity, just alone, wouldn't be enough.
- 18.
- 19.
- 20.
21. Mrs. C: Mm hmm
22. Dr. L: and that we would have ta say something like brain damage.
23. Mrs. C: Mm hmm
24. Dr. L: in terms of B's problems
25. Mrs. C: Mmm.
26. Dr. L: Because it's a kind of thing that's— it's not just hyperactivity that's gonna be helped with a little medicine. He is going to need a special education all the way through.
- 27.
- 28.

<sup>16</sup> This interview is extensively analyzed in Maynard (in press). See also n. 7 above.

- 29. Mrs. C: Uh ha.
- 30. Dr. L: We feel.
- 31. Mrs. C: Yeah.

The clinician also *identified* with the parent by displaying her own resistiveness to the diagnostic term (she portrayed herself as not liking it and as being “forced” to use it in lines 1–2, 4–5). After that, Dr. L suggests that “something . . . not working right in the brain” (lines 5, 7) is causing the symptoms that had been agreed upon earlier. Here, these symptoms (hyperactivity, seeing the world in a different way, having disorganized thoughts) are reassembled in a three-part list (lines 9, 11–12, and 14–15, 17), a rhetorical device that, by suggesting a sense of completeness and unity (Atkinson 1984, p. 57; Jefferson 1989) to the package of symptoms, artfully renders an appeal beyond the sheer content of the list. And each part of the list meets with agreement tokens (lines 10, 13) or other continuers (lines 16, 21, 23) that permit Dr. L to progress to delivery of the official diagnosis (lines 22, 24). Thus, as opposed to being some unilateral declaration of Dr. L, the list is collaboratively produced. Accordingly, to the extent that this list serves as a warrant for the upcoming diagnosis, the basis for the warrant is in the parent’s as well as the clinic’s perspective. In complex ways, the use of a PDS in this interview permitted seemingly disparate views of a child to be reduced.<sup>17</sup>

If parental-clinician disparity is reduced, it is nonetheless managed without compromise. That is, it seems that the PDS and related devices do not involve negotiation over the existence, nature, and duration of problems. Instead, proposing to bring a parent’s perspective in line with their own position, clinicians use the series persuasively. It is by way of containing a recipient’s perspective as an embedded feature that such deliveries may convince the recipient to align with the clinical position.<sup>18</sup> A further effect of using the PDS is to portray the clinician not as one whose assessment is an independent discovery, nor the recipient as one who must be moved from a state of ignorance to knowledge. Rather, the recipient is one who partially knows the truth, and the clinician is one who, in modifying or adding to what a recipient already knows or believes, proposes to ratify that perspective.

Insofar as the PDS helps solve a generic problem of bad news deliveries, then, there is an interactive aspect to it. Both presenting and receiving bad news are enormously difficult experiences. A solution to the difficulty seems to involve constructing the news delivery so that bearer

<sup>17</sup> Other features of this interview, especially the reference to “schools,” “doctors,” and “special education” will be discussed below.

<sup>18</sup> In discussing uses of agreement between clinician and parent, Strong (1979, p. 112) suggests that parents “were treated as persons who could be persuaded, once they knew the facts.”

and hearer are mutually involved. By eliciting recipients' perspectives, clinicians can proceed to give diagnostic news in a relatively hospitable conversational context and can include recipients' perspectives as constituent elements of the report. Also, where the diagnostic report is possibly controversial, use of the PDS might have rhetorical advantages, as it does in ordinary conversation.

In these ways, therefore, the PDS is a conversational mechanism that is *adapted* to the clinical setting. In ordinary talk, persons use the series to deliver a report, assessment, or opinion in a confirmatory way. In conversations among both unacquainted and acquainted interactants, the production of potentially controversial displays of perspective in a serial way shows a mutuality of perspective. Similarly, professionals can employ the series when informing parents or patients of highly charged diagnoses. This at least works to promote parents' *understanding* of what may be technically difficult clinical jargon and terminology. Additionally, by coimplicating their recipients' knowledge or beliefs in the news they have to deliver, clinicians also present assessments in a publicly affirmative and nonconflicting manner, show sensitivity to their relationships with parents or patients, and work to convince them of the clinical position.

#### DIFFERENCES BETWEEN CLINICAL DISCOURSE AND ORDINARY CONVERSATION

If talk in institutional settings is, in basic ways, continuous with that in ordinary life, it is also dramatically different. Inspecting detailed aspects of the PDS in clinical settings reveals significant disparities, and these lend to or are part of the asymmetry in the doctor-patient relationship. First, as in ordinary conversation, there are both "marked" and "unmarked" perspective-display invitations. In the clinic, however, both kinds of queries seek a single end, which is producing the situated sense of children "having problems" that are in need of remedial, expert attention. Thus, participants in the discourse constitute children as clinical objects (cf. Silverman 1981) and simultaneously provide for the clinician to pronounce an authoritative version of the child. In part, this authority derives from the reflexivity of "problem proposals" to the seeking of professional expertise. Second, even though the PDS partakes of an independent order of interaction, clinicians and parents produce opinions and reports through contrastive displays of knowledge that enact deference and authority. They thereby show an *orientation* to the institutional environment. A final distinguishing feature of the PDS in clinical settings is a rigidity of use that contrasts with the flexibility of ordinary conversation. Such rigidity removes some of the contingency that is inherent in

conversation and can make clinical discourse appear more predictable and manipulated than the former.

### Problems and Problem Proposals: Marked and Unmarked Queries

In clinical discourse, as in conversation, perspective-display invitations are either *marked* or *unmarked*. If they are marked, it is regularly in the “negative” direction; that is, a query will initiate reference to a problem as a possession of the queried-about child.

Excerpt 14 (8.013)

Dr. E: What do you see? as— as his difficulty.

Mrs. C: Mainly his uhm the fact that he doesn't understand everything. And and also the fact that his speech, is very hard to understand what he's saying.

Excerpt 15 (14.012)

Dr. E: What do you think is his problem? I think you know him better than all of us really. So that ya know this really has to be a, in some ways a team effort to understand what's going on.

Mrs. D: Well I know he has a— a learning problem, in general. And speech problem an' a language problem. A behavior problem, I know he has all o' that but still, in the back of my— my— my mind I feel that he's t— ta some degree retarded.

Invitations that contain references to a difficulty or problem are suggestions or proposals that parents usually accept.

Unmarked invitations do not refer to a problem. The first example here is from our focal interview (see the Appendix).

Excerpt 16 (9.001)

Dr. S: Now that you've— we've been through all this I just wanted know from YOU. HOW you see J at this time.

Mrs. C: The same.

Dr. S: Which is?

Mrs. C: Uhm she can't talk . . .

Excerpt 17 (47.001)

Dr. E: How's B doing?

Mrs. M: Well he's doing uh pretty good you know especially in the school.

Although by different means, both marked and unmarked invitations seek an alignment between parent and clinician on the issue of the child having a problem.

*Marked queries.*—This sought-after alignment is clearer with marked queries (excerpts 14 and 15), wherein parents produce complaints in which they specify some problem of the child. In the bulk of cases, the marked perspective-display invitation and its reply both reference difficulties of a child in these routine and certain ways. That is, parents



converge with clinicians on the position that the child has a problem, and the issue becomes one of what it is and what can be done about it. After the parents display their views, clinicians can easily deliver official findings and diagnoses. Nonetheless, initiating the delivery of diagnostic news with a closed query is a *presumptive* move, which becomes visible when parents disagree with a clinician's query (see Maynard 1985, p. 15). Instead of responding with a problem formulation, parents may take issue with the notion that there is a complainable aspect of the child. Thus, in one interview where both parents were present, the clinician made an inference from the family's application that they understood "a fair amount about what C's problem is." The mother affirmed that inference, but when the doctor, euphemistically referring to the child's problem as "the situation," invites the father to display his view, the father disagrees with the proposal:

Excerpt 18 (22.007)

Dr. N: And we haven't really had a chance to hear from YOU at all as to what you feel the situation—

Mr. G: Well I don't think there's anything wrong with him.

To assert such disagreement necessitates breaking the "frame" of the invitation; rather than producing a canonical reply—a problem formulation or complaint about the child—the parent addresses the proposal that the child has any difficulty at all.

The contrast with ordinary conversation is stark. There, marked invitations are mostly in the positive direction. Those that expect negative assessments or complaints occur in relation to prior talk or knowledge that some item is a "complainable." For example, an announcement of trouble may immediately precede and inform a negatively marked invitation (see excerpt 5 and discussion). In the clinic, of course, the analog to an immediately prior announcement of trouble is a whole series of previous encounters and ceremonies in which others have formulated problems and difficulties of a particular child. Thus, to argue that marked perspective-display invitations suggest or propose a problem as the possession of some individual child is not to say that clinicians have unilaterally discovered a problem and coercively seek to label the youngster. When clinicians produce a marked query, instead of themselves making an initial proposal, they may be furthering someone else's claim or presumption, one that derives from the parents, the school, or some other source (Booth 1978; Davis 1982, p. 137). When recipients of the invitation display their view by producing a description of the problem, they are agreeing with the position that the child has a problem and that constitutes acceptance of the problem proposal and advances the presumption or claim.

*Unmarked queries.*—Perspective-display invitations that ask in more generalized terms about the child are not presumptive in this way. This means they could be asking whether any problem even exists and, if so, wherein it lies. It might appear that clinicians are investigating parents' views as part of the diagnostic process, attempting to discover whether any pathology exists for the child under consideration. Or they might be inviting a "troubles telling," with parents as speakers and themselves as recipients (Jefferson and Lee 1981). In fact, unmarked queries, at least in these data, do not work in these ways, but rather, like their marked cousins, seek and require problem formulations and complaints about the child, which the clinician can address.

That unmarked invitations solicit problem formulations can be established in several ways. First, unmarked queries often cue the parents that they are asking about the family's *clinical* experience rather than any other. Although asking in a generalized manner for the parents' view of the child, unmarked invitations regularly have temporal formulations, which include terms such as "now" and "at this time," and may contain locational formulations, such as "here" and "through this," which refer to the clinic as a "course of action place," or location that is identifiable by its internal activities (Schegloff 1972, p. 101). When these formulations appear in the invitation, they are mirrored explicitly or implicitly in the reply. Refer again to our focal interview or excerpt 16 above, wherein the clinician asks Mrs. C, "Now that you've—we've been through all this I just wanted to know from you how you see J at this time?" Mrs. C's reply, "the same," is an "indexical" expression (Garfinkel 1967) and comparative term that ties to the clinician's utterance and thereby invokes "as before" and "at entry" for understanding. In other words, "the same" can be heard as proposing "at this time" a condition of the child that has a relationship of identity with one that existed when the family first entered the clinic. Because of these temporal and locational formulations, it should be no surprise that, in answering unmarked invitations, parental recipients regularly produce complaints about children's problems. Again referring to the focal interview, recall that the parents immediately go on to produce descriptions of J's difficulties in talking.

Furthermore, when temporal and locational formulations or other cues are not present in an unmarked query, the parent may reformulate it as asking for a problem proposal (parentheses indicate ambiguity with regard to who is speaking or what is said):

Excerpt 19 (16.006)

Dr. V: What is your impression of what's going on with A?

(Mrs. G): (Uh::m) (mm)

→ Mr. G: You mean what seems to be his problem?

Dr. V: Yeah, what— what— how do you see your son.

Mr. G: Uhm well the main thing is not listening.

In a variety of ways, then, it is provided for parents to "hear" unmarked perspective-display invitations as asking for a problem formulation.

Still, unmarked queries may fail to occasion an immediate complaint and problem proposal from parents (see excerpt 12), in which case the clinician will employ various strategies to obtain them. One is to remind parents of why they came to the clinic. This occurs in one case where a pediatrician asked, "How has M been?" The parent, Mrs. S, replied that she did not "think anything is wrong with [him]." Dr. V then suggested there was a previous screening that turned up a speech or language problem, to which Mrs. S responded, "Right." Another strategy involves the clinician listening for or encouraging talk from the parent to which a problem proposal can eventually and relevantly be attached. This can be seen in an ordered relationship that exists between unmarked and marked invitations when they both appear in a single interview. Marked invitations may occur subsequent to unmarked ones (but not the reverse), as excerpt 12 above shows. Initially, Dr. E. asks Mrs. M, "How's B doing?" (line 1). Mrs. M replies that her son is doing "pretty good" in school but goes on to report a discussion in which she had "explained" to B's teacher that "he needs some special class or something." Immediately after this, Dr. E produces a marked query, "Well what do you think his problem is?" (line 14). This query, then, is not issued after the unmarked one (and its reply) in some kind of mechanical fashion. Rather, it takes up an implication from Mrs. M that her son has a problem and thus can be furthering her claim rather than initiating a new one.

Use of a marked perspective-display invitation, in summary, presumes that the child does indeed have a problem. That presumption works to continue an interactive claim. It is most often honored, but it can be dishonored, and this results in initiatives to achieve the presumption as a mutual one before progressing through the series and delivering a diagnosis. Unmarked queries may occasion other kinds of preliminary talk but also ultimately work to elicit problem formulations. Both marked and unmarked queries, therefore, interactionally help establish a taken-for-granted notion that some child "has a problem" and is a proper clinical object, a notion that reinforces the visibility of the clinician's own expertise. This is because of the reflexive relation between problem proposals and the help-seeking trajectory by which a family arrives at the clinic. The evidence for this reflexivity is in the way clinicians handle parental resistance to producing problem proposals. As we have seen, a clinician may then recall the reason why the parents came to the clinic and elicit agreement that there was a problem for which help was originally sought. Aligning on the claim that a child has a problem is thereby linked with a presumption that seeking expert help is part of the legiti-

mate history by which the family and child arrived at the clinic. Insofar as participants organize their search for help according to a social distribution of knowledge in which professionals are proper to consult (Sacks 1972), that is, the authority of clinicians and the relevance of their speaking are evoked at the very moment when the parties establish that the child has a problem. The asymmetry of clinical discourse, then, eventuates in part from a managed convergence between clinician and parent on the existence of a child's problem.

### Contrastive Displays of Knowledge and the Orientation to Social Structure

If participants collaboratively provide for the clinician's display of authority, the PDS performs a constitutive function in clinical discourse. The social fact of clinicians having the authority to diagnose and treat patients' problems, rather than being imposed from without, is constituted in the immediacy of interaction. But it is not just that the actors *provide for* a display of authority by aligning on the proposal that a child has a problem. Clinicians and parents have different ways of assessing such problems; they engage in contrastive displays of knowledge (cf. Tannen and Wallat 1987) and immediately enact the complementarity of authority and deference of their situated identities. In Wilson's (1991) terms, they demonstrate a sensitivity to the nature of the setting and an *orientation to social structure*.

In ordinary conversation, assessments, as products of participation in social events or of other experiences with social objects, are claims to knowledge of those events or objects (Pomerantz 1984a). Thus, through use of the PDS, parties produce opinions and reports on the basis of direct acquaintance with the social object in question or on the basis of what they have "heard" regarding it. In the clinic, while parents still operate that way, claiming personal experience within narratives regarding their child, they do so hesitatingly. Parents' replies to solicitations of their view are often marked with disclaimers ("I don't know"), qualifiers ("maybe"), and other devices that downgrade the status of their exhibited view. Such qualifying tokens and phrases may be encouraged in the precise construction of perspective-display invitations:

#### Excerpt 20 (33.001)

1. Dr. B: Well you've been through a lot of tests with him, seen a lot of
2. different doctors. Do you have any idea of what you think is the
3. problem?
4. Mrs. M: I don't know, I— I don't know even myself. Once me and my
5. sister ( ), she said maybe my ( ) was
6. too close. Or maybe they was too close. My one sister told me

7. maybe I didn't need, you know, maybe if I just had him by himself,  
 8. he'll act, you know better.

In querying the mother for her "idea" and what she "thinks" the problem is, the utterance elicits a reply that is a *subjective* one, an opinion, following which the clinic's report (as we shall see) can be contrastively displayed as *objective*, as a finding (Anspach 1983, p. 368). Related to this is that, in asking, "Do you have any idea of what you think is the problem?" the physician employs a reference term, "you," which is contrastable to the "we" of the clinic and captures the lay/professional partitioning of the "membership categorization device" by which people organize the search for help (Sacks 1972; see also Strong 1979, p. 82). Finally, the reference to "problem," insofar as it is a selection from alternatives such as "trouble," proposes "advice giving" as opposed to "troubles telling" or some other activity as the focal event of the encounter (cf. Jefferson and Lee 1981, p. 411; ten Have 1989).

Clinicians, in contrast to parents, assertively base their reports on purportedly sounder evidence, their tests. When the physician from our last excerpt moves to deliver the diagnosis, it follows further talk in which, in reply to a prompt from Dr. B regarding the nature of M's problems, Mrs. M says, "I don't see why he don't talk."

Excerpt 21 (33.059)

Dr. B: We feel that the problem is that he CAN'T yet. And that he—  
 our— ALL our exams show that he is quite retarded.

The clinical assessment is initially stated in subjective terms, Dr. B using a "state-marker" preface ("we feel that . . .") and thus depicting the position ("the problem is that he CAN'T [talk]") as contingent upon processes internal to the viewer(s).<sup>19</sup> However, when moving to deliver the diagnosis, Dr. V prefaces it with a phrase ("ALL our exams show," line 8)<sup>20</sup> proposing that the diagnosis is a conclusion from external evidence. A regular feature of clinicians' diagnostic news delivery is its *grounding* in what they have "found" by virtue of testing, evaluation, and other "objective" measures (Maynard 1989b; Mehan, Hertweck, and Meihls 1986).

<sup>19</sup> The state marker here appears to do other work as well. By delaying production of the position report, which is a partial disagreement with Mrs. M's implication that her son's not talking is a willful matter, it mitigates the report's assertiveness, and therefore perhaps is a strategy that is affiliative rather than confrontive (see Pomerantz 1984a).

<sup>20</sup> Compare this to Anspach's (1988, pp. 367–68) discussion of how clinicians may use medical technology as an agent ("The EEG showed . . ."), and thereby omit reference to how tests and procedures require interpretation.

Beyond being a different way of adducing evidence for a third-turn report, the reference to test results, as a claim of expert knowledge in the delivery of diagnostic news, is an element in the local social organization of talk that has a structural basis in another setting (the examination), whose interactive logic is itself worthy of investigation (Cicourel 1981, p. 73; Marlaire and Maynard 1990). Access to and knowledge of other settings, moreover, may be a resource for the assertion of authority in a local situation (Cicourel 1987). Consider again excerpt 13, wherein a clinician counters a mother's perception of hyperactivity in her child with a diagnosis of brain damage. When portraying herself as forced to give this diagnosis, she invokes the institutional context—having to “write away” to schools and doctors and the need for special education as opposed to medication—as an explanation for such force. Thus, the very careful movement away from the parent's perspective and toward the clinic's position reflects not just an abstract concern with correct terminology but also a responsiveness to the “context of accountability” (Rawls 1987) in which professionals are embedded. In addition to reporting outcomes of their investigation to families, clinicians must also provide their results to schools, school systems, government agencies, and so on (Mehan et al. 1986; Mehan 1991). The orientation to social structure is clear and concrete.

### Rigidity of Sequential Relationships

That the clinical use of the PDS always seems to aim for certifying a child's problem and for providing an official, test-based diagnosis suggests less flexibility for the series than in ordinary conversation. For one thing, we have already noted that the first two turns may be like a presequence. In conversation, if askers discover a coparticipant's opinion to be at odds with their own, hypothetically they can refrain from producing their own report or contrary assessment. In the clinic, however, a physician, even in the face of disagreement with the parent's perspective, will still deliver the clinical diagnosis. For instance, in the case from which excerpt 18 is drawn, where the father did not think “there's anything wrong” with his son, Dr. N followed with a probe:

Excerpt 22 (22.049)

Dr. N: Mister Smith are there any things about C that worry you?

Mr. G: Not a thing.

Dr. N: Nothing?

Mr. G: Nothing.

Further such solicitations were similarly unsuccessful in obtaining any negative assessment from the father. Finally, Dr. N noted the existence of disagreement and forged ahead with the clinic's diagnosis:

## Excerpt 23 (22.125)

1. Dr. N: Well there's a disagreement on exACTly whether there is a problem
2. or not. I think rather than belabor the point of whether we—
3. whether there is a problem or not? I think we should give you
4. what we found, which is
5. Mrs. G: Mm hmm
6. Dr. N: after all what you came here for.
7. Mrs. G: Mm hmm
8. (1.9)
9. Dr. N: From straightforward pediatric point of view,
10. Mrs. G: Yeah
11. Dr. N: His general health, after he got over that hundred and three
12. point eight
13. Mrs. G: Yeah
14. Dr. N: temperature is— has not been the problem.
15. Mrs. G: Yes
16. Dr. N: Uhhh but a general evaluation. It was very noticeable some of what
17. you described.
18. Mrs. G: Mm hmm
19. Dr. N: C has a problem with language.
20. Mrs. G: Mm hmm

Several points are worthy of note here. First, Dr. N precedes and justifies her presentation of findings by submitting that those are what they “came here for” (lines 4–6). As previously noted, in the face of parental resistance to problem proposals, a device clinicians use is to invoke a reason for the family's visiting the clinic. Second, the doctor delivers the clinical assessment in a two-part format that has a good news–bad news structure (Maynard 1989*b*). What is *not* the problem (lines 11–12, 14) occurs first, followed by a description of what problem C “has” (line 19). Sandwiched between the good news and the bad news is an utterance (lines 16–17) that prospectively characterizes the negative assessment as in agreement with what an intake form or application apparently indicated (Maynard 1991*b*).<sup>21</sup> The clinician purports to package the diagnosis as confirming an earlier statement. Insofar as the delivery itself (line 19) occasions some form of receipt and, more specifically, solicits a display of agreement, the clinician thereby encourages yet again an alignment on C's having a problem. The mother seems to provide displays of agreement (lines 13, 15) as well as continuers (lines 18, 20), but the father remains silent during the delivery. If this means holding to his earlier-stated position, then the problem proposal and diagnosis at line 19 exhibit disagreement with that position and, in fact, occur despite that disagreement. In other words, the clinician elected to pursue the third turn of a PDS even after

<sup>21</sup> See the discussion of excerpt 18. Also, Teas (1989) has analyzed the manner in which clinicians may use written parental assessments to smooth the delivery of a diagnosis.

obtaining an opinion from one parent with which the diagnostic information strongly contrasts.

This pursuit of a report is one aspect of the rigidity to sequential relationships in the clinical PDS. Another aspect concerns the relevance of the PDS to subsequent talk. In conversation, agreement on a social object being assessed inspires further topical talk, while disagreement occasions a topic change. In the conversation from which excerpt 1 was taken, Bob and Al, after trading agreeable negative assessments in regard to wire wheels, discussed them rather extendedly (Maynard 1989*a*, pp. 108–9). When John and Judy both registered their negative opinions about bicycles in excerpt 6, they subsequently told stories about how the bicycles affected their riding or walking across campus (Maynard 1989*a*, p. 107). By contrast, when Jane and Alice discover that they have different opinions about George Herbert Mead, in excerpt 7, a topic change occurs (they engage in introductions). Regularly, in conversational data, when an asker's report disagrees with or disaffiliates from a recipient's assessment or position, it results in topic change. Thus, in comparison with agreement, disagreement within a conversational PDS has different "sequential implicativeness" (Schegloff and Sacks 1973) or systematic consequences for the ensuing talk.

In the clinic, this appears not to be the case. Whether agreement or disagreement is the achieved outcome of using the PDS, clinicians will pursue an elaboration of the clinical position by explaining a diagnosis. At best, this can prolong dispreferred activity and wreak discomfort for clinician and client. At worst, it can result in withdrawal by one or both parties. Short of breaking the relationship, that is, clinical discourse seems to provide no escape from the conflict entailed by parties' strong adherence to divergent positions.<sup>22</sup>

Relative to ordinary conversation, Heritage (1984, pp. 239–40) argues that sequential organization in institutional discourse can involve concentration and specialization of sequential mechanisms.<sup>23</sup> The PDS clearly has a concentrated distribution in the clinic that it does not in ordinary talk, due to the kind of solution to interactional problems it represents.

<sup>22</sup> This does not mean that parties to the clinical relationship do not exert efforts to resolve disagreement. Rather, one of the devices for such resolution—exit from the topic—is not used. But topic "shading," recourse to "comforting" a disturbed recipient, modifying extreme differences in perspective, and other devices can all come into play.

<sup>23</sup> See Whalen and Zimmerman's (1987) analysis of how the "sequential machinery" that characterizes openings in ordinary telephone conversations is specialized and reduced in emergency calls (to the police, for example). Thus, recognitional sequences, greetings, and "how are you's" are absent in these calls. Through eliminating them and moving to "first topic," participants bring about the very institutional context in which they find themselves.



It is, we have seen, a cautious means of delivering bad news, of which clinics often have a surfeit. The PDS is also specialized in that way that it encompasses problem proposals and contrastive displays of knowledge and thereby helps to constitute children as clinical objects and clinicians as authorities to treat them. Beyond this, insofar as disagreement between parental and clinical positions does not provide for exit either from completing the series or continuing to talk on the disagreed-about topic, sequential relationships have become rigid. In the clinical context, in other words, some of the contingency surrounding the way in which sequences are built and the effects they have on subsequent talk seems to be diminished. This rigidity suggests that clinical discourse can be more predictable than ordinary conversation. At times, because what the parents may think appears not to matter for the presentation of a discrepant clinical position, and due to the rhetorical aspects of the PDS, its use appears more manipulative than in everyday talk. In other words, clinicians may presumptively rely on their abstract authority while giving the *appearance* of incorporating the parent's perspective during a diagnostic informing. Excerpt 23 shows the possible duality or even duplicity here; while the clinician complicates one parent's perspective in the delivery, her assertion of the clinical view simultaneously contradicts the very position she had in fact elicited from the other parent.

## CONCLUSION

Medical sociologists have suggested that the suppression of patient experience in favor of a clinical perspective permeates doctor-patient interaction. This phenomenon seems apparent in our focal interview (see the Appendix), where the clinician actually asks the parents of a developmentally disabled child for their view, probes them, and then delivers clinical information that relates only to limited aspects of what they say. Analysts account for this phenomenon in various ways that explicate the authority of the physician in relation to the deference of the patient. Doctors have cultural authority that allows them to ascertain what is wrong with a patient and to determine what needs to be done. In some macrosocial views, this reproduces class relations in contemporary capitalism, while in other theories, authority is more pervasive than belonging to just the physician. Medical discourse and its technologies of surveillance control both physicians and patients, and are reaching into every realm of human behavior. Microanalytic analyses, making a case for direct study of interaction, are still somewhat similar to their macro counterparts in arguing that the "voice" of medicine takes precedence over the "voice" of the life world and does so because of a technocratic consciousness among physicians that prohibits mutual dialogue with their patients.

Thus, at the very least, a picture emerges in which clinical discourse represents a radical disjunction from the presumed symmetry of talk in everyday life or, even more extremely, is coming to overwhelm and supplant ordinary conversation. However, research has not actually compared clinical discourse to everyday conversation. Moreover, studies characterize discourse as either being a product of external, institutional forms of organization, or as primarily occupied, to paraphrase Giddens (1984, p. 136), with "mobilizing" the institutional context and its authoritative modes of control. My analyses show that the discourse has an internal logic and orderliness that derive from the interaction order *sui generis* (Rawls 1987) and in particular its sequential organization (Schegloff 1987). If conversation is "the basic form of speech exchange system" (Sacks, Schegloff, and Jefferson 1974) and is the "home" environment of procedures that can be employed in diverse settings, then a knowledge of ordinary talk is required in order to fully understand the asymmetries in institutional and other discourses (Heritage 1984, p. 240).

From this standpoint, the PDS, as a mechanism for providing diagnostic news in clinical contexts, is the counterpart of a conversational device whereby any person, before delivering a report or assessment, can ask recipients to display their own positions and can then tie the report to what their recipients have said. Whether it manages a problem of understanding or of the fit between the parties' perspectives, the series seems particularly appropriate in social relational circumstances that warrant caution. Little wonder, then, that this device would be adaptable to a clinical environment where pediatricians or other professionals must inform parents or patients of technical and highly charged diagnoses. By adducing a display of their recipients' knowledge or beliefs, clinicians can potentially deliver the news in a hospitable conversational environment, confirm the parents' understanding, coimplicate their perspective in the news delivery, and thereby present assessments in a publicly affirmative and nonconflicting manner. In short, the PDS allows deliveries of news and assessments to be accomplished in a manner of mutuality and social solidarity.

When clinicians do not use the PDS and thus more straightforwardly deliver a diagnosis, they may presume that clinical findings converge with the parents' understanding and views. Such presumptions can be correct, but they can also be incorrect, in which case recipients show extreme forms of interactional alienation and bewilderment.<sup>24</sup> In the de-

<sup>24</sup> See the "Roberts" case and discussion in Maynard (1989b). Also the stories in Jacobs (1969) and Darling (1983a, 1983b) wherein parents recount their experiences of being told the diagnosis of retardation for their children. At times they were as angry and shocked at the manner in which it was presented as at the diagnosis itself.

developmental disabilities clinic, clinicians then may elicit a display of the parents' perspective *after* presentation of the diagnosis, and thereby work retrospectively to align them with the clinical position (Teas 1989). In routine medical encounters, Heath (in press) similarly shows that physicians who straightforwardly give diagnostic assessments may subsequently elicit responses that indicate the patient's cooperation with the professional perspective. In one instance, after telling a patient that his physical symptoms are due to "anxiety," and the patient produces a minimal response ("mmh"), the doctor asked him, "How would you feel about that?" The patient answered by agreeing with the assessment. Thus, the concern with mutuality sometimes becomes evident in diagnostic presentations that do not involve the PDS, particularly when patients or parents show resistance to the clinical view.

Therefore, the PDS makes transparent interactional concerns that may be at the core of institutional exhibits of authority. Understanding this interactional core, moreover, allows technical explication of such authority. First, through making or eliciting problem proposals in the beginning turns of the series, clinicians provide for the relevance of displaying an authoritative version of a child. Second, through systematically using contrastive forms of knowledge and through making references to the institutional context of a diagnostic decision, participants show an orientation to social structural relationships that reinforce the clinic's authority. Third, sequential relations between turns of the PDS and between the PDS and subsequent talk appear to be more rigid than in ordinary talk, a rigidity that results in more predictability and manipulation in the clinical setting. In sum, while clinical discourse may be asymmetric, it is not so in any unadulterated, comprehensive, or totalistic fashion, but in particular and specifiable ways.

Let us return, then, to the fundamental phenomenon, the suppression of patient or client experience in favor of the clinical perspective. Previous research, including language-based studies, says or implies that this asymmetry represents the imposition of physician's power and authority, which reproduces the society's overall, external, institutional structure. The argument here is that, within institutional discourse, more is going on. Despite social theory—for instance, about the institutionalization of doctor and patient roles (Parsons 1951, p. 424)—it would be an unusual situation if relying on the institutional order were the only means to ensure the stability of the doctor-patient relationship, for it would mean that medical and other professional settings would comprise their own forms of talk and share nothing with mundane encounters (Clayman 1989). To be sure, patients and parents seek expertise in regard to their life world difficulties and receive avowedly official reports and technical versions of these difficulties in ways that promote or reproduce the insti-

tution of medicine. However, if such reports and versions are bad news, their delivery will be predictably difficult in a purely local, embodied, interactional sense. Therefore, clinicians as ordinary members of society can be expected to have devices for handling these interactional difficulties. Exploring such a possibility requires comparative analyses of institutional discourse and everyday conversation, which shows that coimplicating a recipient's perspective in a bad news delivery allows for at least the appearance of understanding and mutuality in this highly charged situation. In short, the asymmetry of discourse in medical settings may have an institutional mooring, but it also has an interactional bedrock, and the latter needs sociological appreciation as much as the former. Finally, if medical discourse has such a bedrock, no doubt various institutional discourses—in legal, educational, and other settings—do as well. Research on such discourse can take seriously the ethnomethodological proposal that, *regardless of the setting*, there is an indigenous orderliness to everyday scenes of social interaction.

## APPENDIX

This is a transcription of the beginning part of an informing interview. The details and symbols on the transcript represent conventions that were developed by Gail Jefferson (see, e.g., "Transcript Notation," pp. ix–xvi in J. Maxwell Atkinson and John Heritage, eds., *Structures of Social Action: Studies in Conversation Analysis* [Cambridge University Press, 1984]). They are designed to provide vocal information and prosodic detail (silence, intonation, sound elongation, emphasis, etc.) for a reader's visual inspection, and thus to preserve a sense of the original interaction as it actually and naturally occurred. These conventions are listed below, and the transcript follows the listing.

### Transcript Conventions

1. Overlapping speech
 

|   |  |
|---|--|
| <p>A: I didn't know [that]</p> <p>B: [It's ] true</p> | <p>Brackets denote beginning and ending of overlapping speech.</p> |
|---|--|
2. "Latched" utterances
 

|   |  |
|---|--|
| <p>A: Let's wait on it. =</p> <p>B: =Okay</p> | <p>Equal signs indicate no interval or gap between the end of one utterance and the beginning of a next.</p> |
|---|--|
3. Intervals between and within utterances
 

|  |   |
|--|---|
| <p>A: He drove (0.2) uphill.</p> <p style="padding-left: 40px;">(1.3)</p> <p>B: Yeah? (.) How far.</p> | <p>Numbers in parentheses mark elapsed time in tenths of a second; a period enclosed in parentheses indicates a short gap of one-tenth of a second or less.</p> |
|--|---|

## Interaction and Asymmetry

### 4. Speech prolongation

A: I did oka::y.

B: Goo:::d.

Colon(s) show that a prior sound is prolonged. The more colons, the longer is the prolongation.

### 5. Intonation

A: It's got (0.2) four stories? Yeah.

B: It does,

Punctuation marks are not used as grammatical symbols, but for intonation. A period marks downward, a question mark upward, and a comma "continuing" intonation (i.e., slightly rising).

### 6. Emphasis

A: She hadda LOTta books.

Capitalization displays various forms of emphasis or stress, including volume and/or pitch, and so on.

### 7. Aspiration

A: .hhh hhhh I gue(h)ss so

An "h" marks audible breathing. The more "h's," the longer the breath. A period preceding indicates "inbreath"; no period denotes "outbreath." Breath markers may occur between speech particles or in the midst of speech. In the midst of speech, they may indicate plosiveness, as with laughter particles.

### 8. Transcription conveniences

A: Well ((cough)) I don't know.

((microphone noise))

B: ((whispered)) Neither do I.

Materials in double parentheses indicate difficult-to-transcribe vocal sounds, features of the setting, or characteristics of the talk.

### 9. Inaudible utterances

A: (Is that right?)

B: ( )

Materials in single parentheses indicate transcribers are not sure about words contained therein. If no words are within the parentheses, this indicates that talk was indecipherable to the transcriptionist.

## Transcript of Informing Interview

1. (Start of tape)

2. Dr: . . . Now that you've— we've been through all this I'd just like to  
3. know from YOU how you see J at this time

4. (2.2)

5. Mo: The same

6. (0.7)

7. Dr: Which is?

8. (0.5)

9. Mo: Um she can't talk, I mean she ta::lks but she doesn't you know (0.1)
10. the sound
11. (0.4)
12. Fa: It's [not it's not ] clear you know
13. Mo: [Like the: words]
14. Fa: [she can't speak] word clearly (0.2) [she ] can't pronounce uh word or
15. Dr: [( )] [mmm]
16. Fa: you know
17. (0.5)
18. Dr: mm h
19. Fa: She just talk like uh a regular other like— the other kids, like
20. babies you know?
21. Dr: Mm hmm
22. Fa: Cuz we have smaller kids (0.4) and I— I don't de— de way I see it I
23. think she try to imitate them you know to talk the same way they talk
24. (0.2)
25. Dr: Mm hmm
26. Fa: So in a way maybe she attract more attention because all the times
27. (0.5) .hh you know when uhh one of the smaller kid you know (0.2) s—
28. say something or sounds funny or you know does something funny you
29. know (0.8) we l: laugh and uhh:: she looks (at wa) she looks' at us and
30. uhh (she know how she gets— ) she's jealous
31. Dr: Mm hmm
32. Fa: So she tries to act the SAME way so uh you know.
33. (1.0)
34. Dr: ( ) .hh do: uh how old are your younger children?
35. (0.6)
36. Fa: Mm I think, one and a half or two?
37. Mo: Uh (0.2) one, a:nd (0.2) the the other one is three
38. (0.8)
39. Dr: (Mm hmm) Now the three year old does that—
40. Mo: He talks
41. Dr: He talks much [better than J]
42. Fa: [Yea he does ] does uh
43. Mo: [( ) ]
44. Fa: clearer than J
45. (0.2)
46. Dr: A:nd (0.2) uh when J was very little and the other two children
47. weren't there she still wasn't
48. (0.3)
49. Mo: No
50. Dr: progressing the way she should=
51. Mo: =and she usted to do— things that weren't normal, at all
52. (0.6)
53. Dr: Like w[hat ]
54. Mo: [You know] hh she use to lick the floor when we used to tell

## Interaction and Asymmetry

55. her not to do [that ] (0.2) .hh and you know it— like we use ta  
 56. Dr: [Mm hmm]  
 57. Mo: When we (useta) teach (all) my sister because my mother had [her ]  
 58. Dr: [Mm hmm]  
 59. Mo: most of the ti.me hh she use to say like she— you know she couldn:  
 60. (0.7) sh— it use ta take lo:nger with her to learn things  
 61. (0.6)  
 62. Fa: I [don't know (why:)] (0.9) I::— I don't know] I— we were told that  
 63. Dr: [Why— why do think that this [(you know) ] ]  
 64. Mo: [ (I don't know)]  
 65. Fa: she was spoiled  
 66. (0.7)  
 67. Mo: No [: but you KNOW I— ] this [nurse that saw her I took her to] this  
 68. Fa: [by her grandmother ] [( ) that way some times]  
 69. Mo: friend of mine's house with my sista, .hh and she's a nur:se and she  
 70. told me, that girl she don't look like, you know she's nor:mal, and  
 71. everybody used to tell me the same thing like she was retar:rded or  
 72. some:thing?  
 73. Dr: Mm. Is this something that you were worried about? that she might be  
 74. retarded? (0.1) and that might be the reason  
 75. (0.6)  
 76. Fa: (Well) [I can't worry abou— ] I can't worry about it because  
 77. Dr: [for [the language (problem)] ]  
 78. Mo: [( )]  
 79. Fa: I have to live with [that ] I can't worry ((laugh)) .hh  
 80. [((slap))]  
 81. Dr: Well: even if you have to live with this, this something you— that's  
 82. been in the back of your mind? that (0.2) maybe that was the reason  
 83. why she isn't (0.5) talking?  
 84. (0.4)  
 85. Mo: I don't think (0.3) so, I think she just slo:w in learning  
 86. (0.4)  
 87. Fa: [That's right] I think sometimes[( )]  
 88. Dr: [Mm hmm ] [Is she] slow in learning everything  
 89. or there's somethings that she can learn very quickly, some things  
 90. that [she can pick up on ]  
 91. Mo: [Yes (0.2) some things] she could pick up quicker [than others]  
 92. Dr: [like what? ]  
 93. (1.0)  
 94. Mo: Like uhm (1.3) ts— let me see (0.5) LIKE she watches sesame street  
 95. an th— she know like, uh some of the ABC's she knows an— .hh [and ]  
 96. Dr: [Now— ]  
 97. Mo: to count, like I was saying too, .hh she doesn' know how to count=  
 98. Fa: =what if she [might be absent minded]  
 99. Mo: [and the two year o:ld? ] he's sm— you know  
 100. (0.2)

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101. Dr: Mm hmm =  
 102. Mo: =He s— I see that he's smarter than her  
 103. (0.4)  
 104. Mo: [(Well) I mean for] a three year old?  
 105. Dr: (ha) [(well what about)] (yeah) what about doing  
 106. things like it— (0.4) helping you around the house, setting the  
 107. table: or (0.4) dust [ing?]  
 108. Mo: [No ]  
 109. (1.2)  
 110. Dr: She doesn't do that—  
 111. Mo: No  
 112. Dr: How about playing with things like blocks: (0.6) or crayons  
 113. Mo: She (knows ho— ) I mean, she doesn't play with that she breaks them  
 114. Fa: [When she ] plays with crayons (.) on the wall  
 115. Mo: [Let's put it that way]  
 116. (0.4)  
 117. Fa: [.hh ha ha .hh ha ]  
 118. Dr: [.hh she doesn't (.) do it on paper?]  
 119. Fa: [No just scribbles ( ) you know they get] carried away  
 120. Mo: [No I tell to do it on paper ( )]  
 121. Fa: they go start scribbling on the wall (and all over)  
 122. (0.8)  
 123. Dr: .hh thee— thee psychological testing (.) that was done here (0.3)  
 124. for her intelligence— .hh showed that although J's not a genius  
 125. (0.2) .hh [that] her intelligence (.) was (0.4) at (0.1) the lower  
 126. Mo: [no ]  
 127. Dr: end of what we would consider normal intelligence  
 128. (0.8)  
 129. ( ): ( )  
 130. Dr: And she does not appear to be a reTARded child (0.2) .hh ze zaying  
 131. well okay if she's not retar:rded (0.5) you know why th[e heck ]  
 132. Fa: [ta— .hh]  
 133. Dr: i(.hh)sn't the kid talking.  
 134. (0.5)  
 135. Dr: .hh we also [don't have any] evidence that she has any hearing  
 136. Fa: [hhh .hh ]  
 137. Dr: problems, her hearing seems to be fine so (0.2) sometimes you know  
 138. deaf children (0.4) don't talk (0.4) .hh (0.6) so: okay that's not  
 139. the problem well then w:hy (.) you know here she is (.) the other  
 140. kids are talking so you obviously you're doing something RighT (.)  
 141. cause your other kids are coming along=  
 142. Mo: =yeah=  
 143. Dr: =and learning .hh so then you say— what's wrong with J? If it's not  
 144. something wrong with YOU .hh uhm (0.5) J has (0.1) .hh a very  
 145. (0.3)  
 146. Fa: ((cough))  
 147. Dr: specific problem (0.4) with language (.) there is (0.1) .hh a special



148. part of the brain (0.3) which (0.2) has to do with la:nguage and  
 149. (0.2) .hh understanding what is said to you, and then s— getting out  
 150. the words, that you want to say (0.6) and for SOME reason or other  
 151. and I (0.5) cannot give you a good reason why this is so for J, .hh  
 152. (0.2) .hh in particular but for some reason this: (0.5) particular  
 153. thing that the brain does which is so important that we call  
 154. language, it is not doing well in J's case. And so (0.2) she has  
 155. great difficulty in understanding what is said to her and great  
 156. difficulty in getting the words out.

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# Status Homogamy in the United States<sup>1</sup>

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According to classical works on social stratification, status homogamy can be regarded as an indicator of the "openness" of society. In contrast to previous approaches, this article treats marriage choice as a multidimensional phenomenon and makes a distinction between ascriptive- and achievement-oriented characteristics. Ascriptive status homogamy is measured by the similarity of spouses with respect to their fathers' occupational class, while the achieved dimension of status homogamy is measured by the similarity of spouses' educational attainment. Multivariate log-linear models are used to explore the relative importance of these factors for the choice of a spouse, and the article tests the hypothesis that there has been a transition from ascription to achievement in patterns of marriage selection. This study first demonstrates empirically that previously conducted synthetic cohort analyses of educational homogamy suffer from selection biases and then, using the Occupational Change in a Generation (OCG) surveys, analyzes two *real* marriage cohorts. The analyses show that education is a more important boundary in marriage selection than social-class origins and that educational homogamy has increased over time. At the same time, there is some indication that ascription has become a less important boundary in marriage selection.

## INTRODUCTION

The study of social stratification has traditionally focused on three related questions: What are the main dimensions of inequality in society? What is the strength of this inequality? How much mobility do families and individuals have in the social hierarchy? The third question can be phrased as a question about the "openness" of status groups and has traditionally been measured by assessing the degree of inter- and intra-

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generational occupational mobility. An alternative way of measuring the openness of society is to focus on how much people from different status groups interact on a basis of equality. In this respect, the selection of marriage partners is particularly important. Marriage is a choice for a long-term relationship that is—at least under certain historical conditions—focused on procreation and characterized by intimacy and close personal ties. Marrying someone from a different status group is not only accepting that person as an equal lifetime partner, it is also choosing that the next generation will not continue the distinctions between status groups that currently prevail. Questions about the rigidity of the social structure can therefore be answered with empirical analyses of marriage patterns (Glass 1954; Lipset and Bendix 1959; Blau and Duncan 1967; Hout 1982; Sixma and Ultee 1984; Jones 1987).

A second way of applying the study of homogamy to questions about social stratification lies in its multidimensional character. Individuals belong to several status groups at the same time, and these social differences are not necessarily correlated. The existence of intersecting group memberships suggests that, for part of the population, making a match in one respect implies forgoing a match in another. In these cases, people choose which dimension of homogamy they consider most important. Hence, a study of multidimensional homogamy can shed light on the relative strengths of different dimensions of social stratification. In this respect, the traditional distinction between achieved and ascribed dimensions of inequality is important. Some theorists on stratification have argued that ascriptive criteria such as class background, race, and ethnicity have become less important in determining the socioeconomic positions that people achieve during the life course. They argue instead, that achieved qualities, particularly educational attainment, are now the dominant criterion for the distribution of life chances in society (Blau and Duncan 1967). The parallel with marriage patterns can easily be drawn: questions about how much someone can get ahead socially and economically in spite of a disadvantageous social background are similar to questions about whether two individuals who are attracted to each other will get married despite their coming from different social backgrounds. More specifically, if marriage partners have a high degree of similarity in their social backgrounds, that could be regarded as evidence for the prevalence of ascriptive mechanisms of stratification. If brides and grooms are similar in their own cultural values and preferences—as, for instance, is indicated by educational homogamy—that would indicate that society is more oriented to achievement than to ascription. In the former case, marriage binds families of origin together, whereas, in the latter case, marriage connects individuals independently of their families of origin.

The conceptual resemblance of interclass marriage and intergenera-

tional mobility has often been emphasized in pioneering studies of social stratification (Sorokin [1927] 1959; Glass 1954; Lipset and Bendix 1959). Nonetheless, the importance of ascription versus achievement has not yet been explored in the context of intermarriage.<sup>2</sup> Both the empirical and theoretical literatures have interchangeably defined status homogamy as the similarity of spouses' ascribed status attributes, as indicated by their fathers' occupations (Burgess and Wallin 1943; Centers 1949; Berent 1954; Hope 1972), and the similarity of spouses' achieved status characteristics, as indicated by their own occupations (Marvin 1918; Hunt 1940; Hope 1972; Ramsøy 1966; Hout 1982) and educational attainment (Hollingshead 1950; Berent 1954; Garrison et al. 1968; Michielutte 1972; Rockwell 1976; Spanier and Glick 1980; Sixma and Ultee 1984; Jones 1987). Conceptual distinctions between these different kinds of homogamy seem to have been ignored.

In this article I present an analysis of the multivariate structure of status homogamy. My first aim is to assess the relative importance of boundaries of ascription and achievement for marriage choice. Ascriptive status homogamy is indicated by the similarity of social-class background; the achieved dimension of homogamy is indicated by the similarity of educational attainment. My second aim is to explore whether there has been a transition from ascription to achievement in patterns of marriage selection.

#### PREVIOUS STUDIES OF STATUS HOMOGAMY

Although research on status homogamy started early in this century (Marvin 1918), in comparison with developments in research on occupational mobility and status attainment, there has been no impressive progress. Most studies have simply described the similarity of spouses in terms of a single characteristic (parental status, occupation, or education) or in terms of several characteristics dealt with separately. Table 1 presents an overview of findings in 10 bivariate studies of homogamy in the United States conducted in the past five decades. Despite the variety of samples under consideration, the differences in the categorization of variables, and historical factors affecting the outcomes, researchers consistently found high degrees of status homogamy. For occupational status, the percentage who have similar attributes is about 35%, for education, the

<sup>2</sup> An exception can be found in research on other dimensions of ascription. Schoen and Wooldredge (1989), e.g., have analyzed the role of education vs. race in marriage selection. Another exception may be the literature on the marital mobility of women (Tyree and Treas 1974; Chase 1975). Since this research analyzes the association between the occupations of *husbands* and the occupations of *wives' fathers*, it does not deal with homogamy directly.



TABLE 1  
OVERVIEW OF FINDINGS IN TEN AMERICAN STUDIES OF HOMOGAMY

| Study                                       | Year | N       | Description of Sample                                       | Ncat | D (%) |
|---|------|---------|---|------|-------|
| A. Husband's and Wife's Father's Occupation |      |         |   |      |       |
| Burgess and Wallin .....                    | 1943 | 986     | Nonrandom sample of engaged couples in Chicago, 20-30 years | 4    | 49    |
| Centers .....                               | 1949 | 449     | Married couples from non-farm background, 18-80 years       | 7    | 43    |
| Rubin .....                                 | 1968 | 15,084  | White married couples, 22-41 years (OCG-I)                  | 5    | 36    |
|   |      | 10,879  | White married couples, 42-61 years (OCG-I)                  | 5    | 40    |
| B. Husband's and Wife's Education           |      |         |   |      |       |
| Burgess and Wallin .....                    | 1943 | 1,000   | Nonrandom sample of engaged couples in Chicago, 20-30 years | 3    | 54    |
| Hollingshead .....                          | 1950 | 431     | Marriage licenses in New Haven                              | 3    | 66    |
| Garrison et al. ....                        | 1968 | 123,488 | Birth certificates in Minnesota                             | 3    | 50    |
| Michielutte .....                           | 1972 | 40,445  | White married couples (1960 census)                         | 5    | 48    |
|   |      |         | Nonwhite married couples (1960 census)                      | 5    | 59    |
| Rockwell .....                              | 1976 | . . .   | White married couples (1970 census)                         | 6    | 45    |
|   |      |         | Nonwhite married couples (1970 census)                      | 6    | 40    |
| Spanier et al. ....                         | 1980 | 24,152  | White married couples, 35-64 years (1975 CPS)               | 6    | 45    |
|   |      | 2,034   | Black married couples, 35-64 years (1975 CPS)               | 6    | 46    |
| C. Husband's and Wife's Occupation          |      |         |   |      |       |
| Marvin .....                                | 1918 | 49,207  | Marriage licenses in Philadelphia (1913-16)                 | 25   | 8     |
| Hunt .....                                  | 1940 | 675     | Marriage licenses in small town in Massachusetts (1923-37)  | 5    | 36    |
| Hout .....                                  | 1982 | 12,437  | Published table (1970 census)                               | 5    | 34    |

NOTE.—Ncat is the number of categories; D is the percentage of cases on the diagonal. The percentage for Hollingshead's study is based on a combination of separate tables for Catholics, Jews, and Protestants. The percentage for Garrison's study is an average for the 1965 and 1966 table. The percentage for Marvin's study is unusually low because it is based on a 25 × 25 table. The percentage for Hunt's study is based on a combination of tables for three different time periods (1923-28, 1930-32, and 1933-37). In Marvin's study, nonworking wives are included in the table and considered to be married homogamously if they marry a man without an occupation. In Hunt's study, nonworking wives are also included in the table but assigned to the lowest occupational category.

percentages vary from 40% to 66%, and for similarities of the spouses' fathers' occupational status positions, the percentages vary from 36% to 49%. Analyses of homogamy as a continuous phenomenon show that the correlation between the spouses' educational levels is substantial, varying around .60, while the correlation between the spouses' occupational status positions is more modest, varying around .40 (Blau and Duncan 1967; DiMaggio and Mohr 1985; Jacobs and Furstenberg 1986).

Although there exists an early, but failed, attempt to study the strength of several socioeconomic dimensions of homogamy simultaneously (Popenoe 1937), the multivariate approach has had little follow-up. The primary exception is Blau and Duncan's (1967) analysis of a large national representative sample of U.S. males aged 20–64 in 1962 (see also Warren 1966). This study contains a brief multivariate analysis showing that the correlation between spouses' education is stronger than the correlation between spouses' class origins. They also found that the correlation between the spouses' fathers' occupations drops substantially when spouses' educational levels are controlled for.

Trends in status homogamy in the United States have typically been described with analyses of census data (Michielutte 1972; Nam 1965; Rockwell 1976). For instance, by comparing synthetic cohorts of first-married white couples in the 1970 census, Rockwell shows that, in the period before 1950, there has been a clear trend away from random mating. For the postwar period, he finds stability in the ratio of observed homogamy to the degree of homogamy expected under a model of chance mating (Rockwell 1976, p. 89). Trend studies such as Rockwell's are potentially biased because marriage cohorts are compared at one point in time. Since older cohorts have been married longer than younger cohorts, cohorts differ in their rates of attrition. Attrition from marriage cohorts may be selective because the likelihood of divorce and separation is generally inversely related to homogamy (Bumpass and Sweet 1972). The older cohorts may be more homogamous primarily because they have been exposed to the risks of marital dissolution for a longer period of time. If there has been selective attrition, the stable postwar pattern observed in previous studies may conceal true increases in educational homogamy in this period. Another drawback of these studies is that they rely heavily on the use of mobility ratios that are now known to be inappropriate for the study of historical change. Two sets of mobility ratios cannot be the same unless the marginal distributions of the two tables are the same (Featherman and Hauser 1978, p. 413). In the context of intermarriage, this implies that the ratio of observed to expected homogamy cannot remain constant if educational distributions change.

In sum, the empirical literature shows that for various indicators of social status—whether achieved or ascribed—there is a clear tendency

for people to marry homogamously. Scarce findings on the relative and independent importance of social characteristics seem to indicate that education is more important than socioeconomic origins. Studies of trends have found that educational homogamy has remained stable in the United States in the second half of this century, once changes in the distribution of schooling in society have been taken into account. Nevertheless, these findings are not convincing because they are based on statistically inappropriate analyses of synthetic marriage cohorts. Finally, none of the studies examine changes in the relative importance of several dimensions of homogamy simultaneously. My multivariate analysis follows those of Blau and Duncan (1967) and Warren (1966) and extends them by making comparisons over time and by using multivariate log-linear models of variable social distance mobility (Haberman 1979) to ascertain the strength of ascription and achievement in marriage selection.

### THEORETICAL ARGUMENTS ABOUT MARRIAGE SELECTION

Marriage selection is commonly believed to be determined by the preferences people have for similarity in social and cultural characteristics and by the constraints of the marriage market they face in realizing these preferences (for an overview of theories, see Eckland [1968] and Epstein and Guttman [1984]). A discussion of these mechanisms will further illuminate the conceptual distinction between achieved and ascribed dimensions of status homogamy and will enable me to formulate expectations regarding trends in marriage selection.

### PREFERENCES OF POTENTIAL MARRIAGE PARTNERS

Evidence of homogamy exists for a wide range of characteristics, such as intelligence, values, attitudes, deafness, personality characteristics, social origins, religion, race, ethnicity, occupation, and education (Epstein and Guttman 1984). In part, these matching patterns can be explained by the preferences people have for similarity in cultural resources, on the one hand, and in socioeconomic resources, on the other. Cultural resources include values, norms, life-styles, leisure activities, taste, intellectual erudition, styles of speech, and life experiences. Similarity of cultural resources is believed to be mutually rewarding in relationships with friends and spouses. People with similar cultural backgrounds are more likely to confirm each other's behavior and worldviews (Lazarsfeld and Merton 1954), and they share a "common universe of discourse" that enhances mutual understanding (DiMaggio and Mohr 1985). Cultural resources are either acquired in the home environment or transmitted by educational institutions and peer groups outside the home. These two

processes of socialization may be in conflict, and educational institutions have a tendency to counteract the influence of parental socialization. It has been demonstrated extensively that educational attainment has an effect on values, attitudes, knowledge, and life-styles that is independent of, and relatively stronger than, the effect of parental status (Hyman et al. 1975; Hyman and Wright 1979; Davis 1982). Therefore, when adolescents reach marriageable age, they should be more likely to realize their preferences for cultural similarity by making matches on the basis of education rather than on that of social origins (Blau and Duncan 1967, p. 357).

There are several arguments about the role of socioeconomic resources in the process of marriage selection. Probably the most cited theory was developed by Becker (1981), who argues that negative assortative mating on economic status prevails over positive. The central assumption in this theory is that the rewards of marriage stem from the division of paid and domestic labor within the household. According to Becker, marriage is most likely to occur between a person who has a comparative advantage in earning money (usually the male) and a person who has a comparative advantage in domestic labor (usually the female). The rapid growth in women's labor-force participation, however, suggests that Becker's assumption of a strong sexual division of labor within the family does not hold true. When changes in sex roles are considered, an alternative hypothesis about the role of socioeconomic resources in marriage choice may be more plausible. When both partners want to work, the family may experience problems of status incompatibility if the occupational statuses of the spouses are too far apart (Oppenheimer 1977). Under conditions of high female labor-force participation, people may prefer similarity rather than dissimilarity in socioeconomic status.

Since people often marry at an age when they have just begun their socioeconomic careers, the process of spouse selection is complicated by uncertainty (Oppenheimer 1988). As a consequence, people who are searching for a spouse have to rely on proxies in order to assess the type of career marriage candidates will make in the future. Status-attainment research has demonstrated that educational attainment has a much larger direct effect on socioeconomic status than does father's occupational status (Blau and Duncan 1967; Duncan et al. 1972; Jencks 1972; Treiman and Terrell 1975). This makes education a better proxy and, therefore, a better criterion than social origins for selecting a spouse.

In sum, education is not only an important determinant of the spouses' cultural resources before marriage, but it may also function as the prime indicator of the spouses' cultural and socioeconomic characteristics after marriage. This double function of education may well make it the most important factor in marriage selection.

## CONSTRAINTS OF THE MARRIAGE MARKET

How much people are able to realize their preferences for cultural and socioeconomic similarity depends largely on the structure of the marriage market. Marriage markets can be defined either in terms of the demographic composition of the marriageable population as a whole (Goldman et al. 1984), or in terms of the composition of local areas, such as neighborhoods (Ramsøy 1966; Peach 1974; Morgan 1981) and educational institutions (Scott 1965; Reiss 1965; Bayer 1972). When young people live with their parents while searching for a marriage partner, the residential marriage markets they usually face are socially segregated. As a consequence, there is a high probability of their encountering people with similar social backgrounds (Eckland 1968). Living with one's parents can thus be expected to promote homogamy of ascribed characteristics.

Those whose educational careers extend beyond high school often move out of the parental home and experience a change in their matching opportunities. The extensive social life and the narrow age distribution of colleges make them efficient, or low-cost, marriage markets (Scott 1965). Although college populations are somewhat homogeneous in terms of students' social origins, they are, by definition, very homogeneous in terms of students' achieved characteristics. This suggests that young people who enroll in higher educational institutions are more likely to marry someone with a similar education than to find a spouse whose social origins resemble their own. Nonetheless, high educational attainment may also lead to postponement of marriage (Marini 1978), which implies that probably only a small proportion of college students marry while in college. Still, continued exposure to higher education may result in the formation of friendship circles that are homogeneous in terms of education. Becoming accustomed to these patterns of social interaction may increase their chances of marrying someone with a similar education after they leave school.

## EXPECTED TRENDS IN STATUS HOMOGAMY

There are several reasons for expecting boundaries of ascription to become less important and boundaries of achievement more so in marriage selection. Probably the most important change is the rapid increase in educational attainment in the second half of this century. This expansion in the period of secondary socialization implies that the cultural outlook of people at a marriageable age has become more dependent on their own achievements and decreasingly dependent on their social origins. Insofar as homogamy is based on preferences for cultural similarity, we may expect education to gain importance as a factor in marriage choice.

At the same time, the rise in educational attainment implies that increasing numbers of the marriageable population are encountering low-cost marriage markets that are homogeneous in education and heterogeneous in social origins.

Trends in homogamy may also be affected by changes in the process and determinants of socioeconomic achievement. There has been a decline in immobility between father's occupation and son's first occupation, a trend that is paralleled by a decreasing association between occupational origins and destinations (Hauser et al. 1975; Featherman and Hauser 1978). In addition, an individual's occupational attainment has become more strongly dependent on education and less strongly so on parental characteristics (Featherman and Hauser 1978, p. 259). These findings suggest that education has become a more important proxy than parental status in reducing the uncertainty in matching on socioeconomic status.

The changing role of women in society may also affect patterns of marriage selection. It is plausible that the rapid growth of female labor-force participation in the second half of this century has changed the meaning of education for women. Whereas, in times of low female labor-force participation, women's education may have served primarily as an indicator of their cultural resources, the increasing economic activity of women suggests that education has also become an important indicator of their economic resources. It is therefore to be expected that education has become a more valuable criterion in men's choice of a spouse (Schoen and Wooldredge 1989).

To conclude, education's growing importance to an increasing number of young Americans, the rise in the importance of education vis-à-vis parental status in determining future socioeconomic careers, and the changing meaning of education for women may all have reduced the strength of the ascriptive dimension of homogamy and increased the strength of the achievement dimension of homogamy. I turn now to an empirical exploration of the achieved and ascribed dimensions of homogamy in the United States between 1952 and 1973.

#### DATA AND MEASUREMENTS

National representative samples containing information on parents-in-law are scarce. Fortunately, the 1962 and 1973 Occupational Change in a Generation (OCG) surveys collected information on the socioeconomic status of both husband's and wife's parents (Blau and Duncan 1967; Featherman and Hauser 1978). Data on the father and father-in-law pertain to their occupations when the spouses I studied were 16 years old.

Previous trend studies like Rockwell's (1976) and Michielutte's (1972) have compared marriage cohorts at one point in time. Since homogamy is believed to be inversely related to the risk of marital dissolution, and since the older cohorts in these studies have been exposed to that risk for a longer period of time, synthetic cohort analyses are potentially biased. My study differs from previous studies in that I analyze real marriage cohorts instead of synthetic ones. The importance of using a real cohort approach can best be illustrated by providing empirical evidence on the selection bias that a synthetic cohort analysis introduces. By comparing marriage cohorts in the first OCG with the same marriage cohorts 11 years later (in the second OCG), I can demonstrate how the homogamy of a marriage cohort changes over time. Comparing figures within each row of table 2 reveals these attrition effects. Note that the older cohorts are less useful as evidence since not only do marital dissolution and mortality cause attrition, but so, too, does being over 65 years old—the cut-off point of the OCG. Nevertheless, the correlations between the spouses' educational levels increase for all cohorts, and the percentages of those who married homogamously increase for all cohorts except one. Given the fact that synthetic cohort studies typically include cohorts of couples who have been married for several decades, the modest attrition effects in an 11-year period, illustrated in table 2, suggest that previous analyses of long-term trends probably suffered from substantial selection bias.

This study compares two marriage cohorts: men in 1962 who had then been married for 10 years or less and men in 1973 who had then been married for the same length of time. Since the two marriage cohorts have been married equally long, they will have approximately the same rate

TABLE 2  
INTRACOHORT CHANGES IN EDUCATIONAL HOMOGAMY, 1962–1973

| MARRIAGE COHORT* | ZERO-ORDER<br>CORRELATIONS |      | PERCENTAGE<br>HOMOGAMOUS |      |
|------------------|----------------------------|------|--------------------------|------|
|                  | 1962                       | 1973 | 1962                     | 1973 |
| 1957–61 .....    | .614                       | .650 | 48.0                     | 48.8 |
| 1952–56 .....    | .595                       | .601 | 46.8                     | 46.7 |
| 1947–51 .....    | .563                       | .602 | 45.5                     | 48.3 |
| 1942–46 .....    | .595                       | .604 | 45.0                     | 47.6 |
| 1937–41 .....    | .530                       | .603 | 43.5                     | 48.3 |
| 1932–36 .....    | .583                       | .609 | 46.4                     | 52.0 |
| 1927–31 .....    | .613                       | .626 | 51.7                     | 59.9 |

\* Only white married couples of which the husband is in his first marriage were included. Based on five educational categories (as in table 3).

of attrition. One could argue that an increase in the frequency of divorce and separation during this period could cause the attrition to be somewhat higher in the younger marriage cohort. However, there is little reason to believe that the increase in marital dissolution has been caused by changes in homogamy. Instead, researchers single out exogenous factors such as increasing female labor-force participation and shifting attitudes toward divorce as being responsible (see Cherlin [1981] for an overview). If this assumption is valid, the slightly higher attrition in the 1963–73 cohort will not automatically be accompanied by a higher degree of homogamy in that cohort. Only first marriages are considered because marriage selection tends to differ according to marriage order (Jacobs and Furstenberg 1986).<sup>3</sup> The analysis is further limited to white couples because there are substantial racial differences in marriage behavior, and because the small number of nonwhites in 10-year marriage cohorts does not permit a separate statistical analysis. The analysis is based on an occupational classification that is frequently used in social-stratification research. A distinction is made between farmers (including farm laborers) and manual and nonmanual workers, and the latter categories are further differentiated into lower and higher groups (this is roughly similar to Featherman and Hauser [1978] and Hout [1982]). The educational classification distinguishes elementary school, high school, and college educations. Within the latter two groups, further distinctions are made between those with and those without a degree (three vs. four years of high school or college). Percentage distributions of the variables for each cohort are presented in table 3.

## ANALYSES

My analyses focus on three issues. The *first* objective is to compare the strength of achieved and ascribed dimensions of homogamy. The *second* objective is to describe the differences in the degree of homogamy between the two marriage cohorts. The *third* aim of the analysis is to explore the sources of change, in particular, the roles of structural factors (here measured by changes in the distribution of educational attainment and social origins of marriage cohorts), on the one hand, and changes in social mobility (here measured by changes in the association between father's occupation and spouse's education), on the other. Before these issues can be addressed, I need to develop a model of homogamy. In the following section, I explore alternative log-linear models and choose a common model for each type of homogamy. I then use these models to

<sup>3</sup> My information indicates only whether the husband is in his first marriage, not whether the wife is in her first.



TABLE 3

PERCENTAGE DISTRIBUTIONS OF HUSBANDS' AND WIVES' EDUCATION AND HUSBANDS'  
AND WIVES' FATHERS' OCCUPATIONS

| VARIABLE                        | MARRIAGE COHORT |         | CHANGE<br>IN PERCENTAGE<br>POINTS |
|---------------------------------|-----------------|---------|-----------------------------------|
|                                 | 1952-62         | 1963-73 |                                   |
| Husband's father's occupation:* |                 |         |                                   |
| Farm .....                      | 19.8            | 13.9    | - 5.9                             |
| Lower manual .....              | 30.4            | 28.6    | - 1.8                             |
| Higher manual .....             | 21.5            | 24.5    | + 3.0                             |
| Lower nonmanual .....           | 9.1             | 10.2    | + 1.1                             |
| Higher nonmanual .....          | 19.2            | 22.8    | + 3.6                             |
| Total .....                     | 100.0           | 100.0   |                                   |
| N .....                         | 2,254           | 4,733   |                                   |
| Wife's father's occupation:     |                 |         |                                   |
| Farm .....                      | 18.0            | 11.3    | - 6.7                             |
| Lower manual .....              | 31.3            | 28.1    | - 3.2                             |
| Higher manual .....             | 22.6            | 24.1    | + 1.5                             |
| Lower nonmanual .....           | 9.2             | 11.8    | + 2.6                             |
| Higher nonmanual .....          | 19.5            | 24.7    | + 5.2                             |
| Total .....                     | 100.0           | 100.0   |                                   |
| N .....                         | 2,231           | 4,631   |                                   |
| Husband's education:            |                 |         |                                   |
| Elementary .....                | 14.4            | 6.5     | - 7.9                             |
| High school 1-3 .....           | 17.5            | 11.1    | - 6.4                             |
| High school 4 .....             | 36.4            | 40.2    | + 3.8                             |
| College 1-3 .....               | 13.0            | 19.2    | + 6.2                             |
| College 4+ .....                | 18.7            | 23.1    | + 4.4                             |
| Total .....                     | 100.0           | 100.0   |                                   |
| N .....                         | 2,406           | 5,026   |                                   |
| Wife's education:               |                 |         |                                   |
| Elementary .....                | 9.7             | 5.1     | - 4.6                             |
| High school 1-3 .....           | 19.1            | 12.2    | - 6.9                             |
| High school 4 .....             | 50.5            | 50.2    | - .3                              |
| College 1-3 .....               | 11.6            | 16.7    | + 5.1                             |
| College 4+ .....                | 9.3             | 15.9    | + 6.6                             |
| Total .....                     | 100.0           | 100.0   |                                   |
| N .....                         | 2,403           | 5,024   |                                   |

\* Upper nonmanual = professional and technical workers, managers, officials, and proprietors (except farm); lower nonmanual = clerical workers and sales workers; upper manual = craftsmen and foremen; lower manual = operatives, private household workers, other service workers, and laborers (except farm and mine); farm = farmers, farm laborers, and foremen.

develop a multivariate log-linear framework in which achieved and ascribed dimensions of homogamy are analyzed simultaneously. Finally, I estimate a series of nested multivariate log-linear models that allows me to answer the three central questions of the analysis.

### MODELING HOMOLOGY

Log-linear models have the advantage over correlational methods in that they are able to single out that part of the association between spouses' attributes that is independent of the effect of marginal distributions. Following Johnson (1980) on religious assortative mating, I make a distinction between a tendency to marry within the group, or what Johnson calls "intrinsic homogamy," and a tendency to marry spouses near in status rather than those distant in status. Intrinsic homogamy can be modeled with a diagonal parameter that describes the degree of in-marriage over and above that expected on the basis of the marginal distributions (Johnson 1980). The tendency to avoid marriages with people distant in status can be assessed with models of social-distance mobility (Haberman 1979). Distance models structure the off-diagonal cells of a marriage table so that the cell densities decrease in magnitude by a fixed amount as the number of categories in which the spouses are apart increases. The advantage of distance models is that they assume symmetry and summarize the association in the off-diagonal cells with a single parameter.

These models can be refined in two ways. First, the degree of in-marriage may be higher in certain groups than in others; this can be modeled by estimating a separate diagonal parameter for each group. Second, in the fixed-distance model, the intervals between ordered categories are assumed to be equal. This assumption can be tested by estimating variable instead of fixed-distance models (Haberman 1979). In the fixed-distance model, the distances between categories are a function of the number of boundaries crossed, while in the variable-distance model, the distance between each pair of adjacent categories has to be estimated. Log-linear models of variable-distance mobility have previously been applied to the study of religious homogamy (Johnson 1980).

The strategy I followed in this exploration is gradually to relax assumptions about the nature of homogamy. Table 4 presents the goodness-of-fit statistics and the formal description of the models. When I focus first on homogamy with respect to social origins, it appears that adding a single diagonal parameter (model 2) to a model of independence (model 1) greatly improves the fit. Adding a fixed-distance parameter to model 2 also leads to a significant reduction in  $L^2$ . The hypothesis that each group has a different degree of in-marriage is confirmed by the data. However,

TABLE 4  
LOG-LINEAR MODELS OF EDUCATIONAL HOMOGAMY AND HOMOGAMY OF  
SOCIAL ORIGINS\*

| Description of Models†                            | $L^2‡$   | df | $L^2/df$ |
|---|----------|----|----------|
| A. Models of social origin homogeneity:           |          |    |          |
| 1. Marginals .....                                | 598.30   | 16 | 37.39    |
| 2. Model 1 + diagonal parameter .....             | 254.83   | 15 | 16.99    |
| 3. Model 2 + fixed-distance parameter .....       | 134.39   | 14 | 9.60     |
| 4a. Model 3 + farm in-marriage .....              | 31.55    | 13 | 2.43     |
| 4b. Model 3 + variable diagonal parameters .....  | 28.77    | 10 | 2.88     |
| 5. Model 4a + variable distance parameters .....  | 23.18    | 11 | 2.11     |
| B. Comparing models of social origin homogeneity: |          |    |          |
| 1. Diagonal parameter (1 vs. 2) .....             | 343.47   | 1  | 343.47   |
| 2. Fixed-distance parameter (2 vs. 3) .....       | 120.44   | 1  | 120.44   |
| 3a. Farm in-marriage (3 vs. 4a) .....             | 102.84   | 4  | 25.71    |
| 3b. Other diagonal parameters (4a vs. 4b) .....   | 2.78     | 3  | .93      |
| 4. Variable distances (4a vs. 5) .....            | 5.59     | 2  | 2.80     |
| C. Models of educational homogeneity:             |          |    |          |
| 1. Marginals .....                                | 2,597.85 | 16 | 162.37   |
| 2. Model 1 + diagonal parameter .....             | 1,189.23 | 15 | 79.28    |
| 3. Model 2 + fixed-distance parameter .....       | 39.24    | 14 | 2.80     |
| 4. Model 3 + variable diagonal parameters .....   | 33.15    | 10 | 3.32     |
| 5. Model 2 + variable distance parameters .....   | 27.14    | 11 | 2.47     |
| D. Comparing models of educational homogeneity:   |          |    |          |
| 1. Diagonal parameter (1 vs. 2) .....             | 1,408.62 | 1  | 1,408.62 |
| 2. Fixed-distance parameter (2 vs. 3) .....       | 1,149.99 | 1  | 1,149.99 |
| 3. Variable diagonal parameters (3 vs. 4) .....   | 6.09     | 4  | 1.53     |
| 4. Variable distances (3 vs. 5) .....             | 12.10    | 3  | 4.03     |

\* Models are estimated for the pooled cohorts. The second cohort is weighted down to the size of the first cohort. Total weighted sample size for models of educational homogeneity is 4,806; for models of social origin homogeneity it is 4,214.

† Models of homogeneity of social origins are given by:

$$A1: \log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf};$$

$$A2: \log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta;$$

$$A3: \log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta + v_{|i-j|};$$

$$A4a: \log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta + q\delta^f + v_{|i-j|};$$

$$A4b: \log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta_i + v_{|i-j|};$$

$$A5: \log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta + q\delta^f + v_k^D,$$

where  $Hf_i$  is occupation of husband's father,  $Wf_j$  is occupation of wife's father,  $p = 1$  if  $i = j$  ( $p = 0$  otherwise),  $q = 1$  if  $i = j = 1$  ( $q = 0$  otherwise), and for  $i$  and  $j > 1$ ,  $v_i^D = \sum_{i=j}^{i-1} v_i$  when  $i > j$ , and  $v_i^D = \sum_{i=j}^{i-1} v_i$  when  $j > i$ , with  $v_i^D < 0$ . Models of educational homogeneity are given by:

$$C1: \log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We};$$

$$C2: \log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We} + r\delta;$$

$$C3: \log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We} + r\delta + v_{|k-l|};$$

$$C4: \log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We} + r\delta_k + v_{|k-l|};$$

$$C5: \log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We} + r\delta + v_k^D,$$

where  $He_k$  is education of husband,  $We_l$  is education of wife,  $r = 1$  if  $k = l$  ( $r = 0$  otherwise), and  $v_k^D = \sum_{k=l}^{k-1} v_k$  when  $k > l$ , and  $v_k^D = \sum_{k=l}^{k-1} v_k$  when  $l > k$ , with  $v_k^D < 0$ .

‡  $L^2$  is likelihood ratio  $\chi^2$ .

explorations show that the exceptional marriage pattern of people with farm origins accounts for most of the variation in intrinsic homogamy. A model with specific in-marriage parameters for each group (model 4*b*) does not have a significantly better fit than the more parsimonious model in which only the farm category is allowed to have a different degree of in-marriage compared with the other groups (model 4*a*). Model 4*a* is therefore preferred to model 4*b*. Finally, model 4*a* is significantly improved by relaxing the assumption that distances between groups are equal (model 5). Note that model 5 includes only a general in-marriage parameter, a farm in-marriage parameter, and variable marriage boundaries between the four nonfarm categories. Findings with regard to educational homogamy show more or less the same pattern. Adding a general in-marriage parameter (model 2) and a fixed-distance parameter (model 3) significantly improves the fit of a model of independence (model 1). The assumption of equal in-marriage tendencies seems to hold true for educational homogamy, given the nonsignificant improvement in the fit of model 3 by model 4. The hypothesis that boundaries between groups vary in strength is again confirmed by the data (model 5).

To conclude, model 5 is the preferred model for both dimensions of homogamy. Marriage selection can thus be regarded as a combination of two processes: a general tendency to marry people equal in status (intrinsic homogamy) and a tendency for marriage to become less likely as the status distance between individuals increases (avoidance of distance) in which the strength of the status boundaries depends on which pair of categories we look at.

#### MULTIVARIATE LOG-LINEAR MODELS OF HOMOGAMY

Since the research questions focus on two dimensions of homogamy, the education of the spouses and the occupations of their fathers, we need a multivariate model that takes intergenerational mobility, that is, the association between fathers' occupations and spouses' educations into account. For conceptual reasons, and in contrast to the status-attainment approach, I impose no causal order on the data. In the process of marriage selection, individuals demonstrate a set of attributes to others and evaluate a similar set of attributes in their potential spouses. While social origins and education are causally related, it is doubtful whether the mechanisms of demonstration and evaluation have an underlying causal order. People look at each other's origins, given their current destinations, and they look at their destinations, given their origins. Therefore, both dimensions of homogamy are modeled while the association between social origins and education is controlled for.

In order to answer the three central questions of the analysis, I estimate

a series of nested multivariate log-linear models for the pooled sample of the 1952–62 and the 1963–73 marriage cohorts. The models, goodness-of-fit statistics, and formal descriptions are presented in table 5. In log-linear form, the *baseline model* is given by:

$$\log F_{ijklm} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + \lambda_k^{He} + \lambda_l^{We} + \lambda_m^C + \lambda_{ik}^{HfHe} + \lambda_{jl}^{WfWe},$$

where  $Hf_i$  is occupation of husband's father,  $Wf_j$  is occupation of wife's father,  $He_k$  is education of husband,  $We_l$  is education of wife, and  $C_m$  is marriage cohort. Social mobility is taken as given, meaning that a saturated model is used for the association between fathers' occupation and educational attainment for both husbands and wives ( $\lambda_{ik}^{HfHe}$  and  $\lambda_{jl}^{WfWe}$ ). An advantage of this approach is that it prevents the estimates of homogamy in subsequent models from being affected by incorrect models of the relationship between social origins and education.

To assess the degree of homogamy of education and social origins, in-marriage and distance parameters are added to model 1. Model 2a adds parameters of homogamy of social origins, model 2b adds parameters of educational homogamy (equations for models 2a and 2b are available upon request from the author), and model 3a adds both sets of parameters. Model 3a is defined as follows:

$$\begin{aligned} \log F_{ijklm} = & \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + \lambda_k^{He} + \lambda_l^{We} + \lambda_m^C + \lambda_{ik}^{HfHe} + \lambda_{jl}^{WfWe} \\ & + p\delta + q\delta^f + \nu_i^D + r\delta + \nu_k^D, \end{aligned}$$

where  $p = 1$  if  $i = j$  (0 otherwise),  $q = 1$  if  $i = j = 1$  (0 otherwise),  $r = 1$  if  $k = l$  (0 otherwise), and  $\nu_i^D$  and  $\nu_k^D$  are the distance parameters for social origins and education, respectively. In this model, the degree of homogamy is an average for the two cohorts, and it is independent of the relationship between social origins and education for both husbands and wives, as well as independent of the influence of the marginal distributions. The latter effects are again averaged for the two cohorts.

The second set of models in the series focuses on change. In order to simplify matters, changes in the degree to which people avoid marrying a person distant in status are summarized with a single parameter that takes into account the fact that categories are unevenly dispersed over the social-distance scale. For this purpose, I construct a scaled distance parameter that uses the estimated variable-distance parameters  $\nu_i^D$  and  $\nu_k^D$  in model 3a to scale the categories. Although model 3b (equation not shown, but also available on request) does not provide new information—it has the same fit with five degrees of freedom less—interacting the scaled-distance parameter with cohort reveals the general change in marriage selection, while taking into account that intervals between categories vary in magnitude. Note that this approach disre-

TABLE 5

## MULTIVARIATE LOG-LINEAR MODELS OF EDUCATIONAL HOMOGAMY AND HOMOGAMY OF SOCIAL ORIGINS IN TWO MARRIAGE COHORTS

| Description of Models*  | $L^2$    | $df$  | $L^2/df$ |
|---|----------|-------|----------|
| A. Multivariate models of homogamy:   |          |       |          |
| 1. Marginals and intergenerational mobility .....   | 5,515.77 | 1,200 | 4.60     |
| 2a. Model 1 + homogamy of social origins .....  | 4,681.39 | 1,195 | 3.92     |
| 2b. Model 1 + educational homogamy .....  | 1,986.40 | 1,195 | 1.66     |
| 3a. Model 1 + both dimensions of homogamy .....   | 1,396.67 | 1,190 | 1.17     |
| 3b. Model 1 + both dimensions of homogamy with<br>scaled single distance parameters ..... | 1,396.67 | 1,195 | 1.17     |
| 4. Model 3b + modeling changes in homogamy .....  | 1,315.32 | 1,190 | 1.11     |
| 5. Model 4 + modeling marginal changes for hus-<br>bands and wives equally .....          | 1,119.23 | 1,182 | .95      |
| 6. Model 5 + modeling marginal changes for hus-<br>bands and wives separately .....       | 1,098.65 | 1,174 | .94      |
| 7. Model 6 + modeling changes in mobility .....   | 1,049.54 | 1,142 | .92      |
| B. Comparison of multivariate models of homogamy:   |          |       |          |
| 1. Educational homogamy (2a vs. 3a) .....   | 3,284.72 | 5     | 656.94   |
| 2. Homogamy of social origins (2b vs. 3b) .....   | 589.73   | 5     | 117.95   |
| 3. Changes in homogamy (3b vs. 4) .....   | 81.35    | 5     | 16.27    |
| 4a. Changes in marginals equally for husbands and<br>wives (4 vs. 5) .....                | 196.09   | 8     | 24.51    |
| 4b. Convergence of distributions of husbands and wives<br>(5 vs. 6) .....                 | 20.85    | 8     | 2.61     |
| 5. Changes in mobility (6 vs. 7) .....  | 49.11    | 32    | 1.54     |

\* Models are defined as follows:

$$1: \log F_{ijklm} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + \lambda_k^{He} + \lambda_l^{We} + \lambda_m^C + \lambda_{ik}^{HfHe} + \lambda_{jl}^{WfWe},$$

$$3a \text{ adds to 1: } p\delta + q\delta^f + v_i^p + r\delta + v_k^p;$$

$$3b \text{ adds to 1: } p\delta + q\delta^f + v_{|i-j|}^* + r\delta + v_{|k-l|}^*;$$

$$4 \text{ adds to 3b: } p\delta_m + q\delta_m^f + v_{|i-j|m}^* + r\delta_m + v_{|k-l|m}^*;$$

$$5 \text{ adds to 4: } \eta_{im} + \eta_{km},$$

$$6 \text{ adds to 4: } \lambda_{im}^{HfC} + \lambda_{jm}^{WfC} + \lambda_{km}^{HeC} + \lambda_{lm}^{WeC}$$

$$7 \text{ adds to 6: } \lambda_{ikm}^{HfHeC} + \lambda_{jlm}^{WfWeC},$$

where  $C_m$  is cohort,  $Hf$ ,  $Wf$ ,  $He$ ,  $We$ , and homogamy parameters are defined in table 4,  $v_{|i-j|}^*$  and  $v_{|k-l|}^*$  are scaled distance parameters where the scaling of the category values is based on variable distance estimates  $v_i^p$  and  $v_k^p$  in model 3a. Interaction terms in model 5 are defined as follows:

$$\eta_{im} = \frac{\lambda_{im}^{Hf} + \lambda_{jm}^{Wf}}{2}, \text{ and } \eta_{km} = \frac{\lambda_{km}^{He} + \lambda_{lm}^{We}}{2}.$$

gards the more complex equation about whether boundaries have changed in an uneven fashion. Model 4 is defined as follows:

$$\begin{aligned}\log F_{ijklm} = & \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + \lambda_k^{He} + \lambda_l^{We} + \lambda_m^C + \lambda_{ik}^{HfHe} + \lambda_{jl}^{WfWe} \\ & + p\delta + q\delta^f + v^*_{|i-j|} + r\delta + v^*_{|k-l|} \\ & + p\delta_m + q\delta_m^f + v^*_{|i-j|m} + r\delta_m + v^*_{|k-l|m},\end{aligned}$$

where  $v^*_{|i-j|}$  and  $v^*_{|k-l|}$  are the scaled-distance parameters. In this model the degree of homogamy is estimated for each cohort separately. The marginal distributions and intergenerational mobility are taken into account, but these effects are assumed to be equal in the two cohorts. These equality constraints are relaxed when I address the question about sources of change. I estimate three additional models that add parameters for cohort differences in marginal distributions and intergenerational mobility (models 5, 6, and 7). These models reveal the trend in homogamy, net of changes in marginal distributions and mobility. In addition, comparing the changes in homogamy in these models with changes in homogamy in model 4 will shed light on the sources of change. Models 5, 6, and 7 will be discussed in more detail in a subsequent section.

Since the tables are relatively sparse, the interpretation of goodness-of-fit statistics should not be given too much weight. Under these conditions, it is nevertheless still meaningful to compare the fit of nested models as long as the difference in degrees of freedom between models is small, which is the case here (Fienberg 1980).

## THE STRENGTH OF ASCRIPTION AND ACHIEVEMENT

We see in table 5 that adding homogamy parameters to a model that includes parameters for the marginals and the association between social origins and education, significantly improves the fit. More important, we see that the patterns of marriage choice on the basis of education depart more strongly from random selection than do patterns of marriage choice based on social origins. Adding parameters for educational homogamy to a model of marginals, mobility, and homogamy of social origins decreases  $L^2$  by 3,285, whereas adding parameters of ascriptive homogamy to a model of marginals, mobility, and educational homogamy decreases  $L^2$  by 590 with the same loss of degrees of freedom. This suggests that marriage selection in the United States is more strongly oriented toward education than toward social origins. A more detailed assessment of the relative importance of achieved and ascribed dimensions of homogamy can be made by focusing on the parameter estimates of model 3a (table 6).

The positive in-marriage parameters for ascriptive marriage choice

TABLE 6

PARAMETER ESTIMATES OF HOMOGAMY IN MULTIVARIATE LOG-LINEAR MODEL 3a\*

| Parameter Description                   | Value | (Z-value) |
|---|-------|-----------|
| A. Husbands' and wives' social origins: |       |           |
| General in-marriage parameter .....     | .127  | (2.69)    |
| Farm in-marriage parameter .....        | 1.469 | (15.36)   |
| Variable distance parameters:†          |       |           |
| Lower-higher manual .....               | .064  | (1.83)    |
| Higher manual-lower nonmanual .....     | .210  | (5.66)    |
| Lower-higher nonmanual .....            | .054  | (1.16)    |
| B. Husbands' and wives' education:      |       |           |
| In-marriage parameter .....             | -.527 | (9.45)    |
| Variable distance parameters:           |       |           |
| Elementary to high school 1-3 .....     | 1.138 | (16.83)   |
| High school 1-3 to high school 4 .....  | 1.118 | (22.12)   |
| High school 4 to college 1-3 .....      | 1.230 | (25.85)   |
| College 1-3 to college 4+ .....         | 1.264 | (22.70)   |

\* Model is defined in table 5.

† Variable distance parameters are multiplied by -1. Subtracting the antilog of the parameter value from 1 yields the relative decrease of cell frequencies when crossing a specific boundary.

indicate that people have a tendency to marry someone from their own class background. This tendency is, however, much stronger for people from farm backgrounds than for others, a finding that can probably be explained in terms of the social and geographic isolation of the rural population. Similar results have been found in an earlier analysis of occupations of fathers and fathers-in-law in the United States in 1962 (Hope 1972, p. 119).<sup>4</sup> In addition, when the tendency to marry within the group is controlled for, we observe a tendency to avoid marrying people distant in status. However, the manual-nonmanual boundary appears to be a much more salient impediment to intermarriage than the boundaries within the manual and nonmanual groups. Crossing the manual-nonmanual line (from upper manual to lower nonmanual) decreases marriage frequencies by 19%, while crossing the lower-higher boundaries within the manual and nonmanual groups decreases marriage frequencies by only 6% and 5%, respectively.<sup>5</sup> This result is in line with Hout's (1982) findings for data on husbands' and wives' occupations in the United States in the late 1970s.

The parameter estimates of educational homogamy show a somewhat different pattern. There is a strong tendency for marriages to become less

<sup>4</sup> Hope's brief analysis is based on a published table in Blau and Duncan's monograph of the first OCG (1967).

<sup>5</sup> These figures are based on the formula  $P^* = 100*(1 - e^{-P})$ .



likely as the educational difference between spouses increases. When in-marriage is controlled for, educational boundaries are more salient impediments to intermarriage than are boundaries of social origins. Net of these tendencies, however, there is no preference for marrying within the group, given the small and negative general in-marriage parameter.<sup>6</sup> This indicates that achieved and ascribed patterns of marriage selection are based on different underlying processes. Educational marriage patterns result from a tendency to prefer spouses who are near in status to those who are distant, whereas ascriptive marriage patterns result more from a tendency to marry within, rather than outside, one's group.

Focusing on the distances between adjacent categories of education, we notice that there is a relatively large distance between high school graduates and people with some college. When in-marriage is controlled for, crossing the college/high school boundary decreases marriage frequencies by 71%. That this distinction appears to be so important for marriage selection is in line with the traditional characterization of colleges as marriage markets. Perhaps more surprising is the equally important marriage barrier between college graduates and people with some college (a decrease in frequency of 72%). This finding suggests that educational homogamy is not based solely on the dating and mating opportunities provided by institutions of higher education but is also the result of a shared cultural outlook on which years of schooling has an impact (Hyman et al. 1975).

In sum, the findings show that, when marriage selection is used as an indicator of the social distance between status groups in society, the boundaries between educational groups are much stronger than the boundaries between social-origin groups. Children from farm backgrounds are an exception, however. They appear to have an exceptionally low tendency to marry outside their group.

#### CHANGES IN ASCRIPTION AND ACHIEVEMENT

Here, the focus is on changes in the relative importance of ascription and achievement for marriage selection, net of the structural factors that may underlie these changes. In order to assess these changes, model 4 adds interactions of cohort and homogamy to model 3b. Although model 4 includes parameters for marginal distributions and social mobility, it does not take into account how the cohorts may differ in these respects. The

<sup>6</sup> A negative in-marriage parameter does not imply that matching on education is lower than expected on the basis of the marginal distributions. The expected proportion on the diagonal is a combination of the in-marriage parameter and the distance parameters (see Johnson 1980).

change parameters should thus be interpreted in terms of "total change" rather than in terms of "net change"—that is, changes in homogamy, net of cohort differences in marginal distributions and mobility.

Table 5 indicates that allowing homogamy to vary across cohorts significantly improves the fit of the model. The difference in  $L^2$  between model 4 and model 3b is 81.35 with five degrees of freedom. This demonstrates that, on the whole, homogamy has changed significantly between 1952–62 and 1963–73. In order to assess the magnitude and direction of these changes, I present the parameter estimates of model 4 in the top panels of table 7 (for educational homogamy) and table 8 (for homogamy of social origins).

For education, the change parameter in table 7 shows that there has been a statistically significant increase in educational homogamy in the 1952–73 period. In the early cohort, the scaled-distance parameter is 0.873; in the later cohort, the parameter is about 25% higher. In other words, in the later cohort, educational boundaries form a more salient impediment to intermarriage than in the first cohort. The general inmarriage parameter does not reveal any significant change. Changes in the importance of ascriptive characteristics show a contrasting finding (top of table 8). First, there has been a statistically significant decrease in the boundaries that separate the four social-origins groups. In the early cohort, the distance parameter is 1.540, in the latter cohort, it has decreased to 0.745. Hence, the tendency for marriage between people distant in social-class origins has increased in the 1952–62 and 1963–73 periods. The in-marriage parameters show a less clear pattern. First, net of the

TABLE 7  
CHANGES IN HOMOGAMY OF EDUCATION IN MULTIVARIATE LOG-LINEAR  
MODELS 4, 5, AND 6\*

| MODELS AND PARAMETERS           | PARAMETER VALUES |         |        | (Z-VALUE)† |
|---------------------------------|------------------|---------|--------|------------|
|                                 | 1952-62          | 1963-73 | CHANGE |            |
| A. Model 4                      |                  |         |        |            |
| In-marriage parameter .....     | -.477            | -.572   | -.096  | (.92)      |
| Scaled distance parameter ..... | .873             | 1.077   | +.203  | (3.53)     |
| B. Model 5                      |                  |         |        |            |
| In-marriage parameter .....     | -.412            | -.609   | -.197  | (1.73)     |
| Scaled distance parameter ..... | .848             | 1.083   | +.235  | (3.88)     |
| C. Model 6                      |                  |         |        |            |
| In-marriage parameter .....     | -.416            | -.604   | -.188  | (1.63)     |
| Scaled distance parameter ..... | .883             | 1.067   | +.184  | (2.87)     |

\* Models are defined in table 5.

† Indicates statistical significance of cohort interaction with homogamy parameter.

TABLE 8

CHANGES IN HOMOGAMY OF SOCIAL ORIGINS IN MULTIVARIATE LOG-LINEAR  
MODELS 4, 5, AND 6\*

| MODELS AND PARAMETERS           | PARAMETER VALUES |         | CHANGE | (Z-VALUE) <sup>†</sup> |
|---------------------------------|------------------|---------|--------|------------------------|
|                                 | 1952-62          | 1963-73 |        |                        |
| A. Model 4:                     |                  |         |        |                        |
| In-marriage parameter .....     | .009             | .183    | + .174 | (2.32)                 |
| Farm in-marriage .....          | 1.917            | 1.181   | - .736 | (6.47)                 |
| Scaled distance parameter ..... | 1.540            | .745    | - .796 | (2.95)                 |
| B. Model 5:                     |                  |         |        |                        |
| In-marriage parameter .....     | .119             | .131    | + .012 | (.14)                  |
| Farm in-marriage .....          | 1.531            | 1.399   | - .132 | (.68)                  |
| Scaled distance parameter ..... | 1.071            | .965    | - .106 | (.35)                  |
| C. Model 6:                     |                  |         |        |                        |
| In-marriage parameter .....     | .119             | .130    | + .010 | (.12)                  |
| Farm in-marriage .....          | 1.521            | 1.406   | - .115 | (.60)                  |
| Scaled distance parameter ..... | 1.063            | .973    | - .089 | (.30)                  |

\* Models are defined in table 5.

† Indicates statistical significance of cohort interaction with homogamy parameter.

decrease in the overall distance between groups, there has been an increase in the tendency for marriage to occur between people with similar social origins. Note that the increase in the general in-marriage parameter does not necessarily imply that the expected proportion on the diagonal has increased since the latter is a combination of changes in distance parameters and changes in in-marriage parameters. More interesting, perhaps, is that, in the later cohort, people from farm backgrounds more frequently marry outside their group than do those in the early cohort. Since the decrease in the farm in-marriage parameter is much greater than the increase in the general in-marriage parameter and since no distance parameters are estimated for the farm rows and columns, this change points to a real increase in the expected proportion of people from farm backgrounds who marry outside their origin group.

To conclude, when cohort differences in marginals and social mobility are disregarded, educational homogamy increases over time, while the degree of homogamy with respect to father's occupation decreases. This decrease, however, does not apply to the general in-marriage tendency, net of the changing boundaries between groups.

#### STRUCTURAL SOURCES OF CHANGE

This section focuses on two questions. First, to what extent can structural factors, that is, trends in the educational and social-origin composition

of marriage cohorts, explain the change in homogamy? Second, to what extent can the trends in the association between social origins and education explain this change? Two aspects of structural change should be distinguished. The data in table 3 indicate that, parallel to an increase in educational attainment, there has been a convergence of the male and female distributions. The index of dissimilarity of the two distributions has decreased from 16% to 11%. In other words, in the later cohort, fewer women than in the earlier cohort would need to change years of education to make maximum homogamy possible. Since a convergence of these distributions may, in itself, lead to increasing homogamy, irrespective of the rise in education, these two effects need to be separated.<sup>7</sup>

In order to address these issues, I compare changes in homogamy parameters in model 4 with those of models 5, 6, and 7. In model 4 the effect of the marginal distributions is already taken into account, but the effect is averaged for the two cohorts. Model 5 adds cohort interactions that assume equal marginal changes for husbands and wives, that is,  $\eta_{im}$  and  $\eta_{km}$ , where

$$\eta_{im} = \frac{\lambda_{im}^{Hf} + \lambda_{jm}^{Wf}}{2},$$

and

$$\eta_{km} = \frac{\lambda_{km}^{He} + \lambda_{lm}^{We}}{2}.$$

In the next model, the marginal distributions are allowed to change differently for husbands and wives. Model 6 simply replaces the  $\eta_{im}$  and  $\eta_{km}$  parameters by cohort interactions with each marginal effect (i.e.,  $\lambda_{im}^{HfC}$ ,  $\lambda_{jm}^{WfC}$ ,  $\lambda_{km}^{HeC}$ , and  $\lambda_{lm}^{WeC}$ ). A comparison of changes in homogamy in model 4 and model 5 enables me to assess the effect of the change in educational distributions per se, while a comparison of models 5 and 6 yields estimates of the influence of the convergence of the male and female distributions, given the overall change in education. Model 5 has a significantly better fit than model 4, indicating that the increase in educational attainment observed in table 3 is statistically significant. Model 6 has a better fit than model 5, indicating that the relatively stronger in-

<sup>7</sup> The distribution of characteristics of the marriage cohorts analyzed here probably differs from the distribution of these characteristics in the population at risk of marrying in the relevant period. To some extent, this may bias my estimates of the structural effects (McFarland 1975). Unfortunately, it is not possible to correct this problem since the OCG surveys do not enable me to measure the relevant distributions of the unmarried female population (only males were sampled).

crease in educational attainment for wives than for husbands observed in table 3 is statistically significant.<sup>8</sup>

Model 7 allows the association between social origins and education to change across cohorts. This model adds interactions between cohort and the association parameters to model 6 ( $\lambda_{ikm}^{HfHeC}$  and  $\lambda_{jlm}^{WfWeC}$ ). However, table 5 shows that model 7 is not a significant improvement over model 6, which suggests that, net of changes in the marginal distributions, intergenerational mobility of husbands and wives is not significantly different in the two cohorts, at least when mobility is measured in the present way. This section thus limits the comparisons to models 4, 5, and 6. Homogamy parameters for the two cohorts in models 5 and 6 are presented in the bottom part of table 7 (for educational homogamy) and table 8 (for homogamy of social origins).

For educational homogamy, I find that, after changes in the marginal distributions of the variables are taken into account, the increase in the distance between educational groups drops from 0.203 (model 4) to a still-significant increase of 0.184 (model 6). Hence, part of the overall increase in educational homogamy can be attributed to changes in the marginal distributions of characteristics of marriage cohorts. More interesting, perhaps, is that it is only the convergence of husbands' and wives' distributions that explains part of the overall change in homogamy. Modeling changes in the marginals, while ignoring this convergence (model 5), reveals a somewhat greater increase in educational homogamy, but this increase is strongly reduced in model 6. In other words, part of the reason why educational homogamy has increased is that women have become more nearly equal to men in their schooling.

For homogamy with respect to social origins, I find that, once structural changes are taken into account, all the changes in homogamy disappear. In model 4, the distance parameter decreases by a significant amount of 0.796, in models 5 and 6 it decreases by the nonsignificant amounts of 0.132 and 0.115, respectively (table 8). In addition, the strong decrease in intrinsic homogamy among people from farm origins disappears once we take into account changes in the marginal distributions. This finding can be interpreted in terms of the relative decrease in the number of spouses from farm backgrounds. A decline in relative group size leads to a decline in opportunities to marry homogamously and may therefore result in an increase in intermarriage. The fact that the in-

<sup>8</sup> Sex-specific marginal changes are observed for education only. A model that allows the marginal distributions of husbands' and wives' social origins to change without modeling educational change does not have a significantly better fit than a model in which husbands' and wives' social origins are constrained to change equally.

marriage tendency of the farm category remains constant when we model structural change, while in-marriage decreases when we do not model this change, is consistent with this argument.

## CONCLUSION

In this article, I have argued that two dimensions of status homogamy should be distinguished. There is a tendency to match on social origins, a tendency that is explained by the cultural values and preferences as they are transmitted in the parental home. In line with classical notions in stratification research on the openness of societies (Glass 1954, Lipset and Bendix 1959), I have called this the ascriptive dimension of status homogamy. At the same time, people have a tendency to match on their own cultural resources and socioeconomic expectations, which can be referred to as the achievement dimension of status homogamy. An empirical comparison of the importance of these two dimensions of homogamy can tell us something about the relative strength of ascriptive versus achieved foundations of social stratification. The central hypothesis is that the transition from ascription to achievement, as documented in research on intergenerational occupational mobility and status attainment, can also be observed in changing patterns of marriage selection. The article provides an empirical test of this basic idea.

Two marriage cohorts, both taken from the OCG data, were analyzed with multivariate log-linear models of variable distance and diagonal mobility. Ascriptive status homogamy is measured by the similarity of spouses with respect to their fathers' occupational class, while the achieved dimension of homogamy is measured by similarity of educational attainment. The results of the analyses can be summarized as follows. First, although both dimensions of status homogamy are statistically significant, husbands and wives resemble each other more in their educational achievement than in their social origins. Second, if we compare people married 10 years or less in 1973 with people married 10 years or less in 1962, it appears that educational homogamy has increased over time. In contrast, the ascriptive dimension of status homogamy has lost some of its already-modest importance. Although these trends take into account the influence of marginal distributions and the association between social origins and education, they do not take into account how cohorts may differ in these respects. If we allow these effects to vary across cohorts, it appears that part of the trend in educational homogamy can be attributed to declining gender inequality in schooling. Furthermore, changes in the marginal distributions are completely responsible for the decrease in homogamy with respect to fathers' occupations.

In general, the findings provide some alternative support for a transition from ascription to achievement as the foundation of social stratification. The degree of educational homogamy is not only strong in itself, it is also stronger than the degree of social-origin homogamy. The major importance of education for marriage selection can be interpreted as evidence that educational groups function as internally homogeneous and hierarchically ordered status groups. The significant increase in educational homogamy between the 1950s and 1960s suggests that education has become an even more substantial foundation of social distinctions in American society. New research is needed to determine whether the trend toward greater educational homogamy has continued in the late 1970s and 1980s. Further research could also be undertaken in order to determine if the same transition has taken place in relation to such other dimensions of ascription as race, national origins, and religious socialization.

One of the methodological conclusions of this article is that analyses of synthetic cohorts, as presented by Michielutte (1972) and Rockwell (1976), suffer from selection bias. I have shown that marriage cohorts grow more homogamous over time because of divorce, separation, and mortality. This result suggested that the previously observed stability in educational homogamy after 1950 may conceal true increases in educational homogamy. In addition, earlier analyses were based on inappropriate methods for canceling out the influence of the marginal distributions. The log-linear analysis of real marriage cohorts presented here comes to different conclusions concerning trends in educational homogamy.

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## Review Essay: The Power of Talk<sup>1</sup>

*The Theory of Communicative Action. Vol. 2: Lifeworld and System: A Critique of Functionalist Reason.* By Jürgen Habermas. Translated by Thomas McCarthy. Boston: Beacon, 1987. Pp. 457. \$37.50 (cloth); \$14.95 (paper).

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In 1989 Suhrkamp Verlag of Frankfurt published *Zwischenbetrachtungen im Prozess der Aufklärung: Jürgen Habermas zum 60. Geburtstag*, an 839-page compilation of "intermediate contemplations/reflections" somehow connected with Habermas (Honneth, McCarthy, Offe, and Wellmer 1989). It was coedited by four well-known theorists, including the American, Thomas McCarthy, and brought together 30 authors from several countries, all of whom somehow put Habermas's work to use. Eight of the chapters (190 pages) were printed in English, and the roster of authors stretched from well-known academics in midcareer to the venerable Hans-Georg Gadamer, nearly 90 when the book appeared. Just three years before, another 420-page Suhrkamp volume (Honneth and Joas 1986) had dealt exclusively with Habermas's *Theorie des kommunikativen Handelns* (hereafter, *TCA*). An English translation of that book will soon be out, which makes sense in that, in addition to eight European scholars, Charles Taylor, Jeffrey Alexander, Thomas McCarthy, and Habermas himself provided chapters. In fact, Alexander's (1985) *AJS* review essay treating the first volume of *TCA* is reprinted there in German.<sup>2</sup>

No other living social theorist—Merton excepted—has inspired this level of concern. Even Anthony Giddens, recently assayed in three separate anthologies of criticism, does not have the international, cross-disciplinary appeal that has come to Habermas in his first 62 years of life. According to his bibliographer, Habermas published about 250 items between 1952 and 1981, and over 920 responses to his work found print in the same period in German and English (Görtzen 1982). A bibliography updated through 1990 will list over 3,000 publications about Habermas, plus scores of new entries from his own pen (Rasmussen 1990,

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<sup>2</sup> Unlike the first volume, vol. 2 is translated from the third German-language edition, a text revised and corrected from the original 1981 publication.

p. 114). All theoretical questions aside, in sheerly professional terms a great many intellectuals, among them numerous younger Americans with strong philosophical interests, have thrown in their lot with the "Habermas project." And according to Alexander (1985, p. 400), in December 1981, the first 10,000 copy printing of *TCA* in Germany, an expensive two-volume paperback, sold out in a month. (The German translation of Alexander's review deletes the exact figure and changes "month" to "week.") Popular attention on this scale is unheard of in the United States for such difficult work. One must wonder what all the fuss has been these 30 years or so, now that Habermas has 30 books in print in German, and 15 in English (five of which have appeared since January 1988, when the book under review first became available).

There are several ways to answer this. The first and usual tack is to discuss Habermas's ideas, those more or less original to him. Because *TCA* was written in the late 1970s and has received (by my count) no fewer than 35 reviews and review essays in English—in journals as distinct as the *Quarterly Journal of Speech*, *Nous*, and the *Journal of the British Society for Phenomenology*—there are abundant brief avenues toward understanding Habermas's general scheme. Alexander (1985) went through volume 1 carefully in the longest review essay ever published in these pages, and Postone's substantial analysis (1990) of volume 2 explained the principal arguments clearly. In addition, there are already books by Benhabib and Dallmayr (1990), Bernstein (1985), Brand (1989), Forester (1985), Ingram (1987), Kortian (1980), Pusey (1987), Rockmore (1989), Roderick (1986), White (1988), and Wren (1990), among others, which devote sustained attention to *TCA*—sometimes arguing against its central motions, but more often correcting this or that aspect in the course of straight exegesis. Surely a dozen more are in the pipeline, plus special issues of many scholarly journals dedicated to discovering what exactly Habermas is saying.

So, the answer to the question, "Why has Habermas become an industry?" lies somewhere between the undeniably intriguing quality of his ideas, especially to students of philosophy and social thought with strong political convictions, and the equally clear fact that he often communicates in print like a mystagogue. To quote a British Hayek scholar, "The turgid character of much of his writing is a scandal" (Shearmur 1988, p. 49). This, of course, creates an opportunity for massive hermeneutics and by a demographic accident of intellectual history, there are nowadays many available (mostly younger) authors willing to spend their formative years interpreting Habermas for various audiences. Figuring out what his sentences really mean, and what one can then do with this hermeneutically retrieved material, becomes a recognized way to document one's intellectual prowess. This band of interpreters and translators—nearly all of them male—is doing for Habermas what an earlier generation of textual workers did for Parsons, though, in fairness to the latter, he never wrote so densely as his German successor. "It is no accident," as Adorno might have observed, that Habermas has in his later years done textual

homage to Parsons, and perhaps a fitting accident, indeed, that Parsons died while visiting Habermas in Germany—literally passing on the torch of Grand Theorist.

Because this review is appearing in the wake of dozens of others and because of all the brief and lengthy commentary that *TCA* has occasioned, I will approach Habermas's major theoretical statement differently from the expository norm. My interest will be in Habermas qua stylist, rhetorician, agent of persuasion. It is worthwhile to begin this effort with his own version of how *TCA* came to be written. Not long ago he explained that his magnum opus—if, indeed, that is what it turns out to be—originated in 1954 when Habermas was a 25-year-old working journalist. That year he published 25 pieces, mostly newspaper articles. His theoretical contribution was "The Dialectic of Rationalization: Pauperism in Production and Consumption," a 25-page article not yet in English so far as I can tell (Habermas 1954). He says that "the key ideas in this article contain the kernel of much of what I later came to write in *TCA*" (Habermas 1986, p. 191). Precisely like Parsons, who in his private correspondence with friends became a virtual Mencken of prose clarity, Habermas in conversation can transform himself into a clearly communicating fellow of charming simplicity and directness. For example, he says that Heidegger "had the nutty idea that he, as a spiritual leader, could set himself at the head of the whole [National Socialist] movement. You have to be brought up in a German *Gymnasium* to have such notions" (1986, p. 195). This is pretty good German intellectual stand-up comedy, revealing a wry humor that never rears its head in *TCA*. He also explains without any defensive posturing what his ultimate theoretical goal has been: "My thesis, which I develop in the second volume of *TCA* through a discussion of Parsons' theory of media, is this: that those domains of action which are specialized for the transmission of culture, social integration or the socialization of the young, rely on the medium of communicative action and cannot be integrated through money or power. A commercialization or bureaucratization must therefore generate—this is the thesis—disturbances, pathological side-effects in these domains" (p. 175).

Pathological side-effects? The alert reader may sense a bit of welt-schmerz for the world we have lost, a theme once made quite popular by Nisbet's *Quest for Community* (1953). And an authority on postmedieval political thought, Quentin Skinner, has summarized Habermas's project as "continuing the Reformation by other means"—comparing Luther's worldview with Habermas's, and finding strong, normally overlooked similarities (Skinner 1982, p. 35). (It is also instructive that Skinner favors a "historical pragmatics," and not the "universal pragmatics" Habermas champions, which could well be tied to their different assimilations of premodern social theory and the opposing philosophical anthropologies that would result from such differences [Tully 1988, pp. 21 ff.].)

Few readers make light of Habermas's lifelong struggle to "ground"

critical theory in something other than class struggle or *Kulturkritik*, as had his Frankfurt predecessors. (There are noteworthy exceptions: "Habermas, whose work admirers hail as a creative synthesis . . . and whose detractors describe as the efforts of a theorist in a dark woolen suit attracting all the lint that is around" [Smelser 1988, p. 2].) For the least contentious portrait of the entire project, Habermas himself is an illuminating guide:

I defend a cognitivist position. In fact, I am defending an outrageously strong claim in the present context of philosophical discussion: namely, that there is a universal core of moral intuition in all times and in all societies. . . . I cannot imagine any seriously critical social theory without an internal link to something like an emancipatory interest. That is such a big name! But what I mean is an attitude which is formed in the experience of suffering from something man-made, which can be abolished and should be abolished. This is not just a contingent value-postulate: that people want to get rid of certain suffering. No, it is something so profoundly ingrained in the structure of human societies—the calling into question, the deep-seated wish to throw off relations which repress you without necessity—so intimately built into the reproduction of human life that I don't think it can be regarded as just a subjective attitude which may or may not guide this or that piece of scientific research. It is more. [1986, pp. 206, 198]

This is a voice of unvarnished human concern that does not resemble very much the sustained abstractness of *Knowledge and Human Interests* (1971) (regarded by many cognoscenti as his most profound book) or even appear to be kin to the expressive apparatus that created *TCA*. It would be very difficult for anyone working in American sociology to find Habermas's "domain assumption," as revealed in the interview just quoted, objectionable on either political or humanitarian grounds. Few, though, would be able to find much "empirical evidence" of the kind sociologists typically trust that could persuade skeptics—like Skinner or Smelser—to accept Habermas's beliefs.

And yet, finding empirical referents for Habermas's theoretical claims is not the decisive issue in sizing up his contribution to modern sociology. In a letter he wrote to me ten years ago, Richard Rorty, the heterodox American philosopher, referred to Habermas as a philosopher. At the time I disagreed, claiming him for social theory. Since then the lines between these camps have become so fuzzy that Rorty's estimate may be right. If Habermas is indeed a philosopher, even one who often deals in sociological ideas and texts, then putting his work to some empirical use is less the pressing problem than it might be if he were viewed, as I believe he wishes to be, as a social theorist à la Marx, Weber, Schutz, Mead, and Parsons. In fact, in *TCA* he suggests rather strongly that he is the culmination, *Aufhebung*, and final resting place of this very line. And yet few references to Habermas's work appear in sociology journals, either as a source of ideas that find practical expression in research or as

a body of notions inspiring purely analytic or critical work. His name is universally known, but his influence in social research of the American type has remained small.

This neglect is partly due to the arguments he has been making for about 15 years, well summarized by one of the few women scholars who have thoroughly come to terms with him: "The central insight of communicative or discourse ethics derives from modern theories of autonomy and of the social contract. . . . Only those norms and normative institutional arrangements are valid, it is claimed, which individuals can or would freely consent to as a result of engaging in certain argumentative practices" (Benhabib 1990, p. 1). This is an apt characterization of the Habermas whom Rorty correctly denotes as a philosopher. Although much research has been done concerning communication patterns, there is in this general argument a weighty dollop of normative hopefulness quite foreign to conventional research.

Habermas came to these foundational beliefs from a variety of sources too long even to name here, but several seem more obvious and important than others. From Marx and the Frankfurt school he accepted the need for "emancipatory" theory. From Luther, as it were, he took a variety of messages, some of which he alludes to thus: "On the Day of Judgement, as our Christian upbringing has taught us, each of us will step into the presence of God as judge, alone and without proxy, without the protection of worldly honors and goods. . . . In the face of a life history which cannot be confused with another and which must be accounted for personally, all may expect equal treatment, one after the other. From this abstraction of the Day of Judgement has emerged that conceptual connection of individuality and equality upon which the universalistic principles of our constitution are still based, even if these same principles are tailored to fit the fallibility of the human power of judgment" (Habermas 1988, pp. 25–26). Perhaps there is more truth to Quentin Skinner's opinion of Habermas than has been appreciated by others who know less about the Protestant ethical tradition.

And one dare not ignore Kant in Habermas's makeup. There is the important section of *The Critique of Pure Reason* (pointed out by Shearmur [1988, p. 44]) on "Opining, Knowing, and Believing," which runs:

The holding of a thing to be true is an occurrence in our understanding which, though it may rest on objective grounds, also requires subjective causes in the mind of the individual who makes the judgment. If the judgment is valid for everyone, provided only he is in possession of reason, its ground is objectively sufficient, and the holding of it to be true is entitled *conviction*. If it has its ground only in the special character of the subject, it is entitled *persuasion*.

Persuasion is a mere illusion. . . . Such a judgment has only private validity, and the holding of it to be true does not allow of being communicated. But truth depends upon agreement with the object, and in respect of it the judgments of each and every understanding must therefore be in

agreement with each other (*consentientia uni tertio, consentiunt inter se*)

Persuasion I can hold to on my own account, if it so pleases me, but I cannot, and ought not, to profess to impose it as binding on anyone but myself. [Kant (1787) 1964, pp. 645–46]

Shearmur suspects that Habermas's achievement in *TCA* is merely "an exercise in metaphysics." But if one concentrates on Kant's correlated sentiments—"The touchstone whereby we decide whether our holding a thing to be true is . . . the possibility of communicating it and of finding it to be valid for all human reason"—it might make as much sense to say that Habermas sociologized Kant's epistemology, that he took judgments of truth out of metaphysics and private epistemology, and brought them back into the polis where they had begun. This surely has its philosophical rewards in the area of contemporary ethical theory, even if it parts company decisively with sociological research of the usually accepted kind.

If a social theorist's principal duty is to provide hypotheses for positivist testing, Habermas does not meet the minimum job requirements—except perhaps for certain researchers in discourse analysis or communications theory. This accounts in part for the rarity of his name in our leading journals, where proof, not persuasion, is still king—or queen. He says that "cognitive gains" are his goal (Habermas 1986, p. 113) and that content/substance, not merely form/presentation, are what his efforts are all about (p. 206). But when he elaborates on these themes, his vocabulary is one of rights, communicative sincerity, and emancipation from gratuitous oppression. The usual terms of substance used in the American context—household income, infant mortality, education of head of household, average housing cost; in short, the material stuff of social life—do not appear. In their place are extended analyses of what previous theorists have had to say about their favorite topics. Habermas is also sensitive to the accusation that he is utopian. "Nothing makes me more nervous than the imputation that because the theory of communicative action focuses attention on the social facticity of recognized validity-claims, it proposes . . . a rationalistic utopian society. . . . The ideal speech situation is . . . a description of the conditions under which claims to truth and rightness can be discursively redeemed" (1986, p. 174). Redeemed by whom, about what, and in which sort of social context? Who shall guarantee these rights of redemption?

Habermas asks questions that need answering, whether we have entered a postmodern environment of heroic normlessness—as the French claim—or if "we still live in the modern epoch—not in some postmodern sequel to it" (Habermas 1986, p. 212). And there are moments in his "informal" discussions when the gap between his alleged metaphysics and everyday life closes almost completely. When he asks himself how we get "moral intuitions," he answers, "Not from philosophy, and not by reading books. We acquire them just by growing up in any kind of family. . . . There can't be anyone who ever grew up in any kind of

family who did not acquire certain moral intuitions . . . modern developments . . . have brought a real push to universalize these intuitions. . . . I don't believe that we can change moral intuitions except as educators—that is, not as theoreticians and not as writers" (pp. 207–8). This is certainly friendly talk, quite at home with the thrust of American social research. And when explaining how he would define "life-forms," he is equally forthright: "I think I would do so by reintroducing the famous distinction between form and content . . . a life-world which can be accounted for more or less only narratively and intuitively, in everyday language—not theoretically. . . . We cannot but live in a total world. . . . Now the problem is whether one can employ a theoretical language to analyze concrete life-world, as a particular totality, or whether one refrains from that claim and restricts oneself to an analysis of the presumably universal infrastructure which all life-worlds share with each other. It is this infrastructure that I'm interested in" (p. 211).

Reading Habermas at his most serious with confident comprehension, even in translation, is hard work, time-consuming, susceptible to endless misunderstandings, and therefore contrary to the current climate of American theorizing, where clarity and concision are prized—perhaps in determined response to Parsons's murkiness. The latter often wrote fuzzily, under the influence of a heavily evaluative view of social life, despite claims designed to portray himself as a "pure" analyst. Habermas is even more difficult to understand word for word, and at key moments is so elusive in formulation that he is much harder to hit than was his American predecessor and inspiration. Habermas's rhetoric is one of feinting, dodging, and fancy footwork, very unlike the earnest plodding of the ministerial Parsons. But the end result is quite similar, leading to certain questions: What exactly does all this mean for research practice, for setting political and ethical agendas, for carrying on serious intellectual labors? Where does all this take us that is new, different, and better—for theorizing?

Consider certain pivotal passages from *TCA*. (I mean to select material not for its difficulty but for its characteristic tone and significance for the general argument.) After allocating 330 pages (plus endnotes) to selective "reconstruction" of Mead, Durkheim, Luhmann, and Parsons (over 100 pages), inter alia, Habermas concludes with his "thesis of internal colonization," and a postscript on what one might expect from a social theory of the sort he is recommending. Among a few epigrammatic lines (e.g., "For Adorno, this 'administered world' was a vision of extreme horror; for Luhmann it has become a trivial presupposition" [p. 312]), the reader confronts a Hegelianized Parsons-speak which, though challenging to disentangle, posits a "grammar of forms of life" (p. 392) of slight acquaintance with ordinary discourse. For example, "The systematizing power of principled moral consciousness was needed for a motivational anchoring of purposive-rational action orientations so constant and so encompassing as to be able to constitute vocational roles" (p. 315). This is what *The Protestant Ethic* was about, of course, but one does not



gain in understanding Weber or the action Weber was explaining from Habermas's translation. Or, speaking to contemporary life, he observes: "The *dilemmatic structure of this type of juridification* consists in the fact that, while the welfare-state guarantees are intended to serve the goal of social integration, they nevertheless promote the disintegration of life-relations when these are separated, through legalized social intervention, from the consensual mechanisms that coordinate action and are transferred over to media such as power and money" (p. 364; emphasis in source). Every critique of the welfare state says something of this sort, but with less apparent profundity.

It is typical of Habermas's rhetoric that when he finds himself at a juncture of thought confronted unsatisfactorily by previous theorists, he does whatever it takes to distinguish his view from theirs, even when such "moves" do little to enhance enlightenment. For instance, when distancing himself from Marxist complaints about reified social life, he combines the breezy with the normatively loaded: "Social pathologies are not to be measured against 'biological' goal states but in relation to the contradictions in which communicatively intermeshed interaction can get caught because deception and self-deception can gain objective power in an everyday practice reliant on the facticity of validity claims" (p. 378). How could this be demonstrated? Does it add to Adorno's *Minima Moralia* (1978) in coming to terms with the breakdown of civilized discourse in postbourgeois society?

There is in all this a human concern for a better existence that is unmistakable—once the jargon is decomposed into regular sentiments—and for carrying on this noble tradition, Habermas deserves every encouragement. One might wish, though, that he could step away from the rhetoric of his schooling and into some modified posture more open to those who could benefit from his ideas. In closing, I will let him speak for himself, combining several passages that are as fundamental to his entire labor as anything else in the book, in hopes that with enough scrutiny, they might say something edifying for those unfortunates whose job it is to comprehend contemporary life:

It is not the uncoupling of media-steered subsystems and of their organizational forms from the lifeworld that leads to the one-sided rationalization or reification of everyday communicative practice, but only the penetration of forms of economic and administrative rationality into areas of action that resist being converted over to the media of money and power because they are specialized in cultural transmission, social integration, and child rearing, and remain dependent on mutual understanding as a mechanism for coordinating action. If we assume, further, that the phenomena of a loss of meaning and freedom do not turn up by chance but are structurally generated, we must try to explain why media-steered subsystems develop *irresistible inner dynamics* that *bring about* both the colonization of the life world and its segmentation from science, morality, and art. [Pp. 330–31; emphases in original]

Deformations of the lifeworld take a different form in societies in which

the points of incursion for the penetration of crises into the lifeworld are politically relevant memberships . . . instead of the reification of communicative relations we find in the shamming of communicative relations in bureaucratically desiccated, forcibly "humanized" domains of pseudopolitical intercourse in an overextended and administered public sphere. This pseudopoliticization is symmetrical to reifying privatization in certain respects. The lifeworld is not directly assimilated to the system, that is, to legally regulated, formally organized domains of action; rather, systemically self-sufficient organizations are fictively put back into a simulated horizon of the life-world. While the system is draped out as the lifeworld, the lifeworld is absorbed by the system. . . . Only when the social sciences no longer sparked a single thought would the time for social theory be past. [Pp. 386, 383]

Amen to that, person!

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## Book Reviews

*Streetwise: Race, Class, and Change in an Urban Community.* By Elijah Anderson. Chicago: University of Chicago Press, 1990. Pp. xii + 276. \$19.95.

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An image haunts Elijah Anderson's perceptive inner-city ethnography, that of the poor, young, black male. His threat pervades the conversation of middle-class gentrifiers in the "Village" neighborhood. His irresponsibility leaves fatherless children behind in the poverty-stricken neighborhood of "Northton." And the intimidating figure he projects on the streets of both communities leads residents to adopt streetwise—wary, guarded—public behavior. Although white racism contributes to this stereotype, the image is held by blacks as well. One of Anderson's poor, young, black male informants, streetwise, says, "I watch my back. I observe everything, look in bushes. . . . And I never cross the street when I see dudes [other black males] coming. . . . That means you're scared" (pp. 170–71). And of a passing encounter he personally experienced, Anderson reports, "I believe the men on the street distrusted me in part because I was black, and I distrusted him for the same reason" (p. 219).

For 14 years, Anderson studied these two adjoining neighborhoods, which emerge in the book as a thinly veiled Philadelphia. The Village, once an integrated haven of the counterculture, was being invaded by "yuppies," a group with little commitment to the earlier liberal traditions. While residents contend over both property values and social values, most of public life is dominated by their proximity to Northton. Housing, schools, politics, evening recreation—in all of these and in other public arenas, Villagers cope with the tension and danger they feel from Northton's black men.

Anderson's depiction of Northton itself is stark. The increasingly poor residents are battered by drug addiction and drug crime. Boys, unable to hope for or even to understand stable family life, embrace hustles and bravado. Girls, vainly wishing for a Prince Charming's rescue, are seduced and abandoned, left to raise children alone but for welfare checks and the compassion of grandmothers. Older residents retreat in fear.

Anderson provides two layers of explanation for the disintegration of Northton. In the background are economic changes that eliminated many of those inner-city, manual jobs that used to pay a family wage. In the

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foreground are cultural changes. Anderson points, in particular, to the decline of Northton's "old heads." These employed, family-oriented, church-going men and women were once role models and tutors for ghetto youngsters. Some died, some moved away, some were discredited by the economic futility of 1980s ghetto life, and some were intimidated by the *new* old heads. The latter

are in many respects the antithesis of the [former] old heads. The man derides family values and . . . feels hardly any obligation to his string of women and the children he has fathered. In fact he considers it a measure of success if he can get away without being held legally accountable. . . . To his hustling mentality, generosity is a weakness. . . . For him women are so many conquests, whose favors are obtained by "running a game." . . . Self-aggrandizement consumes his whole being. . . . On the corner he attempts to influence others by displaying the trappings of success. Eagerly awaiting his message are the young unemployed black men. [Pp. 103-4]

It is on these cultural changes and their consequences in the public realm, such as street interaction, that the book dwells most.

One can argue with Anderson's analysis. His perspective is largely that of the remaining "old heads." How much should their historical accounts be discounted for nostalgia? Similarly, can the current generation of ghetto youth be as debased as these descriptions suggest? (For example: "Sex is prized not as a testament to love but as testimony to control over another human being. Sex is the prize and sexual contests are a game whose goal it is to make a fool of the young woman" [p. 114].) Perhaps such accounts are only the common complaints older people have about the behavior of youth, behavior that usually fades with maturation. And yet, we have other inner-city ethnographies whose authors present the viewpoint of the street youth: Anderson's empathy is with the older residents and is, for that, all the more valuable.

The validity of an ethnography is judged in part by its frankness, the author's willingness to be honest about those with whom he or she mingled so closely. In *Streetwise*, Anderson does not obscure, rationalize, excuse, or romanticize; he does not patronize. He tells the truth as he sees it.

At least since William F. Whyte, field-workers have explored inner-city neighborhoods, which outsiders labeled as anomic, and have returned from the field to say, "No, there is a community here. The values and practices may not be those of the American mainstream, but the society works nevertheless." Anderson has returned from his fieldwork to say, in effect, "Yes, this is a community in disintegration, a society that does *not* work."

*Race and Class in Texas Politics.* By Chandler Davidson. Princeton, N.J.: Princeton University Press, 1990. Pp. xxviii + 344. \$24.95.

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Texas is a fascinating state—empowered by size and oil wealth, home to a distinctive culture, and the producer of impressive numbers of politicians who move beyond the confines of their state to lead the nation. Chandler Davidson wants to harness our fascination to an appreciation of the complexity of political life in Texas, both because it is important in its own right and because it reflects the larger issues of politics in the United States. Davidson's analysis takes into account a broad historical span, beginning in the 19th century and ending in 1989, and is based on materials from social science publications, surveys, newspapers, anecdotal sources, and his own observations.

Work on this book began in 1976, at a time when liberals and moderates gained control of the state Democratic party. It was clearly a heady time for liberals, and this stimulated the author to reexamine V. O. Key's remarkably prescient volume on southern politics (*Southern Politics in State and Nation* [New York: Knopf, 1949]) for its analysis of Texas politics. Writing well before the South underwent major changes in population, industrialization, and, most critically, in the protection of civil rights, Key looked for hopeful signs that southern politics would become a two-party system freed from the constraints of racism. At the time, Key described Texas as manifesting a "politics of economics." Within an essentially one-party state, Texas displayed strong factions that could be divided along a liberal-conservative axis, even though the specific content of those ideologies tended to vary with the issues of the time. Key predicted (p. 669) that "the extraordinary growth of industry and trade in Texas and the decline in the proportion of Negro population [will] conspire to create a new variety of politics not much concerned about the Negro." In 1976, Davidson could ask whether the liberal takeover of the Democratic party was the sign that class politics had come to Texas.

Davidson's assessment of political change in Texas alternates between pleasure—at the presence of an indigenous liberalism, the growth of a two-party system, the success of liberal candidates—and displeasure—at the unbending conservatism of the Republican party, the failure of the legislature to institute liberal policies, and the divisions between blacks and whites. He concludes that the results of the social changes experienced by Texas are found in racial politics, not class politics.

Was it Key who was mistaken in predicting what the future would bring, or were Davidson's expectations of class politics misplaced? Key; it should be noted, never detected clear political divisions between "haves" and "have-nots," largely because the one-party system rewarded politicians who were colorful characters and able to exploit the

prejudices of the electorate, especially if they could count on the resources of personalized political machines. Moreover, the ideological distinctions to which he gave so much prominence were most easily observed among politicians, not among the electorate. How, then, would the emergence of a two-party system enable a transformation beyond the very modest level of class voting that then characterized support for the Democratic and Republican parties nationally? In addition, trends toward the increasingly nationalized character of presidential elections, evident today, have diminished much of the earlier class character of the major parties and increased the extent to which race divides the electorate. To a considerable degree, the state of party politics in Texas is a reflection of changes that have occurred throughout the country.

Clearly, Texas has undergone major changes and, with all its remaining problems, as its political processes have opened up, it now provides for much more minority representation. The 1990 gubernatorial election, in which the impeccably conservative, though personally embarrassing, Clayton Williams was rejected for the liberal Ann Richards, demonstrated that there are even limits to conservatism and to personal politics. In this handsomely produced book, with its 35 photographs of Texas politicians, the early group photo in which Ann Richards appears is also a remainder of the continuities in Texas politics.

*Learning Capitalist Culture: Deep in the Heart of Tejas.* By Douglas E. Foley. Philadelphia: University of Pennsylvania Press, 1990. Pp. xix + 247. \$31.95 (cloth); \$14.95 (paper).

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*Learning Capitalist Culture* is an ethnographic study of the popular culture practices that reproduce social inequality. Set in the 1970s in a small South Texas high school with a large Mexican-American population, the study examines students' interactional styles and ritualized performances for information about class, race, and sexual inequalities. It aims to tie "Goffmanesque" portrayals of situated actions with broader structural issues, primarily class.

Three central chapters—on football, dating, and classroom play—support the book's underlying theme: the socioeconomic class an adult ends up in is related to the interactional competencies she or he develops in school. Football, dating, and classroom scenes—aspects of popular culture—are presented as stages for learning and displaying the interactional skills and communicative styles that reproduce inequality. Unsurprisingly, a limited 10-year follow-up study revealed that students from socially prominent families, who had occupied leadership positions in school, developed the interactional skills that prepared them for leadership roles in the adult community.

The book's theoretical orientations—which Foley confines to an appendix—are heavily based on those articulated by Paul Willis (*Learning to Labor* [New York: Columbia University Press, 1977]), who wrote the foreword for this volume. Like Willis, Foley argues that students are not simply passive victims of oppressive school structures; rather, students actively conspire in the perpetuation of inequality. However, Foley sees himself as departing from Willis's conception of class culture insofar as he places less emphasis on youths' ideological struggles and more emphasis on the interactional and expressive cultural practices that differentiate working- and middle-class youths.

Foley develops his own interactional perspective through brief critiques of Goffman's and Habermas's relevant ideas. He considers Goffman the empiricist analogue, or ethnographer, of Habermas's more philosophical discussions of the alienated, instrumental speech acts pervading our society. Impression management is treated both as a form of instrumental speech and as a class factor, as cultural capital. The ability to successfully manage impressions is one cornerstone of middle-class success.

Unfortunately, Foley fails to integrate these theoretical insights with his ethnographic descriptions; they are relegated to short chapter summations and the appendix. This separation, which he intended in order to make the ethnography accessible to a wide audience, burdens the academic reader with the task of going back, connecting, and trying to explain the practices the author describes in terms of quite complex theoretical schemes. Once I began making those connections I found serious problems with the interpretive power of his ethnography.

For example, one of Foley's main arguments is that middle-class males, both Mexican-American and Anglo, were better at impression management than their working-class peers—they were suave around Anglo females (the prize in their patriarchal world) and were able to hide their drinking and dope smoking from parents, thus offering a convincing performance of decency and responsibility. The working-class males, in contrast, were rough, crude, and "too open" about their drinking and dope smoking around Anglo females and parents. Foley is arguing that one communicative style involves being good at impression management while the other involves more "open" communication with limited efforts to manage impressions, or being poor at managed performing. I think this stance is hard to defend. Foley might have done better to argue that middle- and working-class youths have different self-images they want to display, but that both engage in impression management, albeit of different kinds. In any case, Foley's use of "open" implies that working-class youths engage in relatively unalienated communication (in Habermas's sense), but he does not elaborate on that notion.

The most problematic aspect of the book is its treatment of gender. Foley concludes that the female students had "no feminist consciousness about being objects of possession and exchange in a male-dominated dating game" (p. 69). I consider this conclusion suspect. Foley gives far



more attention to masculine, male cultural practices; his references to gender theory are scarce; and his own language is highly sexist. Consider his description of a cheerleader: "Martha, a somewhat shy, plump, likeable cheerleader. She was homey and simple, a kind of earth mother symbol of fecundity and domesticity. Unlike many of the cheerleaders, she was neither cool nor upwardly mobile" (p. 34). Descriptions like these seriously undermine Foley's discussions of gender.

Evidence of his own lack of consciousness around sexism also undermines the integrity of the ethnography. For example, while attending a midnight beer party he overheard a group of young women talking about college. When "Doc" (as the students called him) joined their gathering, the conversation about college apparently stopped because his description turns to a student who "draped" her leg over his, seeming to say, "Ok, sucker, your move" (p. 64). The fact that Foley's presence changed the interaction among the young women is ignored. The fact that they were discussing college is ignored.

*Learning Capitalist Culture* poses excellent questions and offers provocative theoretical possibilities. Unfortunately, the ethnography fails to realize these possibilities.

*No Space of Their Own: Young People and Social Control in Australia.* By Rob White. Cambridge: Cambridge University Press, 1990. Pp. xiv + 237. \$49.50.

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In the past few weeks, while I have been reading *No Space of Their Own*, the Buffalo, New York, media have been favoring the sort of reports that provide the grist for Rob White's thoughtful book. Several stories dealt with a New Year's Eve incident in which several black youths, outfitted in Oakland Raiders jackets, severely beat a white man—on Main Street, downtown, in front of a police station, and with people around. Another series of stories featured demands for a citywide curfew to deal with what is reported as a growing problem of youth crime. And the latest issue of *Business First* describes a report by the Commission on the Skills of the American Workforce that calls for a more highly trained and better-educated work force if the United States is to remain competitive in the international marketplace.

White's book offers a frame, or perspective, from which to understand all these events. In deep background is the familiar concept of a "socially constructed" adolescence, an idea born in the 19th century and culminating in the post-World War II era with the emergence of a leisure-based "youth culture." According to White, until recently this invented adolescence functioned reasonably well as a transition from childhood to the adult world of work. But beginning in the mid-1970s, when Australia

(and much of the world) entered a period of sustained economic crisis, adolescence lost its transitional function. As unemployment among young people worsened, many lower-class youths found themselves forced back into dependency on their parents and without the money that would make them welcome in the stores and malls. In search of "space of their own," and full of hostility for their plight, some youths took to the streets (say, in Raiders jackets). Their increasing visibility brought citizens and authorities to the point of "moral panic" over crime, drug use, auto theft, and other problems identified with youth. Efforts at social control (rather than amelioration, treatment, or rehabilitation) followed, including attempts to render youths harmless and invisible (the curfew). At another level, social planners advocated "education" and "training" as long-term solutions to the "youth problem" (the story in *Business First*).

Despite the title, the book's most compelling arguments are not about the problem of space. To be sure, White has interesting discussions linking youths' need for social and psychic space to car theft, street life, and other aspects of youth culture, and he even suggests that the failure of youth to develop "political consciousness" is in part a consequence of "increasing regulation of public space" (p. 197). But many readers will find the material on space provocative rather than convincing—a side-show, really, for the main event.

At the heart of the book is an important and, ultimately, depressing argument that links labor economics and ideology. According to White, the major capitalist nations are in the early stages of a profound transformation in the nature of modern work. In Australia and elsewhere, the trend is toward jobs that require less skill rather than more (e.g., tourism, clerical work, and food preparation). This transformation is already producing "a permanent underclass" (p. 209) that cannot find meaningful work and is unable to participate in consumer society (this last insult could be a blessing in disguise). Rather than confront this reality, government, business, and labor unions have joined together to deny the existence of the problem (as White defines it) and to "blame the victim" (unemployed youth) for preventing the emergence of a reconstructed Australia. The crux of their argument is that Australian workers lack skills and education, and their solution—offered in a series of initiatives sponsored by the Hawke labor government in the 1980s—is training and education to improve the "skill base" (p. 16) of the labor force.

As White explains, the whole idea is an elaborate fraud. For example, the traineeships created under the 1985 program, Priority One—Young Australia, neither generated nor guaranteed jobs. Its function was, instead, "ideological": to "shift the debate about unemployment away from the objective lack of paid jobs and adequate wages, to that of the 'deficiencies' in individual teenagers" (p. 24). Consistent with a debased labor market, the "skills" offered under the Australian Traineeship Scheme (1986) were in behavior, personality, and impression management—hardly training for upward mobility. According to White, behind the rhetoric of job training and education is a socially conserva-

tive, capitalist project: the production of a docile, disciplined, adaptable, individualistic, and interchangeable work force, lacking even the liberal education necessary to understand the nature and source of its oppression.

White's argument relies perhaps too heavily on argumentation and logic. One must simply accept assumptions about future trends, including the permanence of high rates of unemployment and the continued degradation of work. Another assumption, reasonable enough on its face, is that the nature and quality of work is determined by capital, independent of the work force (put another way, one cannot create good jobs by first producing highly educated and skillful workers). Behind the book's arguments about space, drugs, and car theft is the conviction that the denial of meaningful work is the central and determinative experience of adolescence and, increasingly, young adulthood, and, conversely, that the provision of meaningful work would be the springboard for a transformation in the lives of youths. White could be right on this last point, but I suspect his emphasis on work oversimplifies the adolescent experience.

Despite its Australian focus, White's model of social control in a labor-market context is no less relevant for Germany, Japan, or the United States. His demonstration of the ideological content of training programs and education schemes is especially important, because it challenges long-standing beliefs about the future of the postindustrial workplace and about the responsibility for the degraded nature of modern labor. *No Space of Their Own* deserves a large audience.

*The Political Economy of Unemployment: Active Labor Market Policy in West Germany and the United States.* By Thomas Janoski. Berkeley and Los Angeles: University of California Press, 1990. Pp. xxvi + 377. \$34.95.

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Policies and practices of other countries arouse far greater interest in the United States now than they did just a few years ago. Particularly in manufacturing and education, Japan and Germany are favorite reference points in discussions of how to do things better.

Drawing implications for practice from cross-national comparisons is a risky business, though. The standard skeptical response is, "We can't do that here; it's embedded in their culture." But the value of looking at other countries is not to copy what they do; it is to challenge unexamined assumptions. If human beings in another place organize themselves and conduct their business very differently, there is nothing inevitable about the familiar and comfortable.

Thomas Janoski's comparison of "active labor-market policy" in the

United States and West Germany poses this challenge but carries the comparative analysis much farther. Janoski is not content to note that the German practices he admires are rooted in history, values, and institutions. He also attempts to identify the key factors in the two countries that produced divergent approaches to dealing with unemployment.

That attempt has three parts. Each part is notable in itself; together they are impressive and powerful. First, he provides a sociopolitical theoretical framework emphasizing the influence of social demands (primarily from organized interest groups), state formation (particularly the welfare state), external events (e.g., war), and ideology regarding citizenship rights. Second, the largest part of the book (chaps. 2–8) is devoted to detailed accounts of each country's provisions for job placement, job training, and job creation: the three components of active labor-market policy (ALMP). Finally, he treats each country's annual expenditures over the past 30 years on these three measures (as a percentage of GNP) as the dependent variables in statistical analyses designed to test the associations inferred from the historical analysis.

Such an ambitious undertaking exposes a scholar to justifiable criticism about details. There is something to offend everyone. I, for example, would argue with his neglect of the German chambers, unique quasi-public bodies with no counterpart in the United States, and I would take strong exception to his claim that "the jury is still out on the apprenticeship-vocational school controversy" (p. 115). During the 1980s, the proportion of youth in apprenticeship grew by 37%, and apprenticeship is increasingly combined with further vocational schooling and higher education rather than treated as an alternative. More important, however, the book offers keen insights into both countries and sets a high standard for comparative policy-related research.

The fundamental source of Germany's superior ALMP, Janoski concludes, is a socialization orientation in the United States in contrast to a work orientation in Germany. For policymakers in the United States, unemployment is presumed to result from the individual inadequacies of the unemployed. Therefore, the appropriate response is to improve individuals by teaching them how to be workers. In Germany, policymakers attribute unemployment to a lack of jobs or a lack of skills. Job training and job creation are logical consequences of this attribution. Among the historical precursors are massive immigration into the United States and the concomitant rise of social work as a profession.

But there is more to the story than that. Germany has a major political party with a consistently strong ideological commitment to ALMP. When Sozialdemokratische Partei Deutschlands (SPD) chancellors are in office, ALMP expenditures rise. Moreover, the SPD has effectively advocated participation rights in the labor bureaucracy. German ALMP is firmly ensconced in a large, stable, and heavily funded Labor Ministry. Expenditures on ALMP in Germany are strongly correlated with the unemployment rate.

One might assume that such a correlation is obvious, but it does not hold in the United States, where the government cuts spending during bad economic times. The exception in the recent past was the first OPEC oil shock, when ALMP expenditures rose because unemployment was seen as resulting from an uncontrollable external event. Democratic presidents have been no more likely over the past three decades to oversee ALMP than Republican presidents, and Left party power correlates with ALMP only when defined by an index that excludes Southern congressional representatives. Reagan's election constitutes a unique and powerful influence, leading to drastic cuts in ALMP.

Separating the influence of the Reagan administration from that of the second oil shock, which saw ALMP expenditures fall because job creation had been discredited, is clearly a challenge, but Janoski makes a credible effort. He readily acknowledges this and other threats to the statistical analysis, pointing out, for example, that choosing different lag times (i.e., the amount of time assumed to be required between the occurrence of an influential event and the implementation of a policy response) yields opposite causal sequences among some of the variables in the U.S. model. The inevitability of such anomalies underscores the value of an analysis that integrates theory, historical documentation, and statistics.

*Social Policy and Welfare State in Sweden.* By Sven E. Olsson. Lund: Arkiv, 1990. Pp. ix + 348.

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For students of the welfare state, Sweden holds a special place. Much of the work in comparative political economy has emphasized the role of the highly organized Swedish working class in securing broad and generous welfare state protections. Sven E. Olsson takes us beyond such simple analyses, emphasizing the deep historical roots of social democracy in Sweden and considering the role of ideas, the organization of politics, and the activities of social classes other than labor in building and securing Swedish social policy. Olsson's book presents a comprehensive overview of the development of the Swedish welfare state and a detailed consideration of several key episodes of welfare-state development.

The book is actually four separate essays, each of which examines a distinctive phase in Swedish welfare-state development. The essays present a wealth of detailed information about the development of social programs in Sweden as well as data about their financing. At the same time, they provide a good introduction to the actors central to the creation and extension of the Swedish welfare state and to the political circumstances under which these actors operated. While the book is a valuable reference to the study of the Swedish welfare state, the essays are not

effectively tied together by any overarching themes. And, at times, the reader wishes the onslaught of facts and figures were tempered with more analysis.

For American readers, the first essay, which examines social policy discourse before the 1930s, and the last, which considers the fate of the Swedish welfare state in light of pressures to decentralize and privatize, are likely to be of the most general interest. These essays present material less well known to American audiences and make valuable contributions to understanding the range of factors that created the Swedish welfare state and have kept it in place through the 1980s.

The first essay seeks to uncover the "formative domestic ideas" that would later make Sweden the international leader in social policy development; it also explores the conditions under which these ideas germinated prior to the 1930s. Olsson highlights the interaction among three forces: international influences, including, most important, the example of social insurance in Bismarck's Germany; urban intellectuals, including the leaders of charitable organizations and the pioneers of social research in Sweden; and a number of popular mass movements, including temperance and consumer cooperatives as well as trade unionism. He presents a fascinating account of how Bismarck's ideas created the seeds of a universal people's (rather than workers') insurance system when they were introduced into the more socially egalitarian and politically fluid environment of Sweden. As he traces the evolution of these ideas, Olsson introduces interesting, although insufficiently elaborated, organizing concepts such as "intellectual corporatism." A firmer institutional rooting of the actors would have helped to clarify his arguments about the links between popular movements, ideas, and politics in Sweden.

The final essay considers the current prospects for the Swedish welfare state as it confronts pressures to privatize and decentralize. The discussion of the Social Democratic party's efforts to use decentralization to fend off privatization is an important addition to debates about the future of welfare states. Although the fate of social policy in Sweden remains uncertain, Olsson's work highlights the creative and active stance that has been the hallmark of the Swedish Social Democrats. It suggests that politics may play a critical part in determining how trends toward growing social fragmentation and individualization are managed and what they will mean for social policy.

The other two essays of the book explore the interwar and postwar periods of Swedish welfare state consolidation. The second essay is a short, highly argumentative piece examining the role of the Conservative party in the 1946 pension reform's creation of a system of flat-rate universal benefits along with a means-tested housing allowance. Olsson disputes an interpretation that identifies Conservative party support as decisive in passing the reform. Although the polemic makes for entertaining reading, and is easily the most sharply argued part of the book, the arguments are too eclipsed and, at times, too ad hoc to be fully satisfying. The third and longest essay is a comprehensive review of the development of

Swedish social policies and an evaluation of the extent to which they have met their goals. The chapter presents a wealth of data presented in numerous charts and tables that track the development of policy in the areas of pensions, health, family and maternity, unemployment, and housing. Although the chapter opens with a list of theories about the welfare state, there is a sharp separation between theory and description in this chapter that makes it more useful as a compendium of program development than as a sustained argument about the evolution of the Swedish welfare state.

Olsson's book effectively documents a century of growth of the Swedish welfare state. In the process, Olsson spins off a variety of insights—many of which could have been more systematically developed—about why Sweden became the most advanced welfare state in the West. Despite the looseness of some of his arguments, Olsson's book will be an essential resource not only for students of Sweden but also for students of the welfare state in general.

*Nuclear Politics: Energy and the State in the United States, Sweden, and France.* By James M. Jasper. Princeton, N.J.: Princeton University Press, 1990. Pp. xix + 327. \$39.50.

John L. Campbell  
*Harvard University*

Do political and economic structures determine policy or do policymakers act independently from these structures? James Jasper offers an answer in *Nuclear Politics* and, in doing so, provides a fascinating comparative study of commercial nuclear energy policy that examines why the United States, Sweden, and France all embarked on ambitious nuclear construction programs prior to the 1973 oil crisis but diverged afterward. French policymakers continued to favor nuclear power after the crisis and helped to expand long-term nuclear construction; U.S. policymakers inadvertently refused to take strong action, thereby discouraging further demand for nuclear power and contributing to the industry's collapse; Swedish policymakers decided deliberately to phase out nuclear power by 2010.

In contrast to others, who have argued that political and economic institutions shaped these policy outcomes in each country, Jasper maintains that these accounts must be *supplemented* with analyses of culture, by which he means the worldviews of individual policymakers and the ideological cleavages among political parties. He argues that political elites with tremendous enthusiasm for nuclear technology generally dominated early nuclear policy-making everywhere and had far greater influence on the initial commercialization of the technology than the political and economic institutions in which they operated. After the oil crisis, policymakers subscribing to a cost-benefit view that emerged through a variety of political struggles concerning the control of nuclear policy-

making in the United States. An ascendant cost-benefit view was coupled politically with a moralist antinuclear perspective in Sweden. These cultural shifts contributed substantially to the demise of nuclear power in both countries. However, technological enthusiasm continued to shape policy-making in France, and the nuclear program expanded accordingly. Although political economic institutions occasionally restricted the choices of policymakers, it was not until the late 1970s that institutions began to systematically limit elite discretion in all three countries. In sum, *Nuclear Politics* blends an analysis of the cultural views and political struggles of policy-making elites with a description of institutional constraints in an explicit attempt to fill in the structures that, according to Jasper, conventional state-centered theories of policy-making leave empty or fill only with utility-maximizing actors.

The greatest strength of *Nuclear Politics* is the detail with which Jasper reconstructs the histories of nuclear power in each country. Indeed, his data—much of it collected through personal interviews with key actors in these countries—are the best yet assembled on the subject. As a result, this is one of the finest comparative histories of the development of commercial nuclear power. Furthermore, demonstrating the importance of culture in addition to institutional constraints is an important insight for state-centered theories of policy-making.

Despite its strengths, *Nuclear Politics* would have benefited from closer attention to some important theoretical and conceptual issues. Jasper describes how the range of policies available to elites varied and, thus, how the relative effects of elite discretion and institutional constraints on policy outcomes changed historically. This may be so, but why? An attempt to theorize how and when institutional constraints expand and contract around policymakers is called for and would have been an important contribution to the literature. This failure to theorize the ebb and flow of institutional, elite, and culture influences leads to problems. For example, by describing how institutions generally had little effect until the late 1970s, ideology and policy-making elites appear to be *far* more important than institutions, at least during the early period—an argument that appears to be inconsistent with his claim that culture and politics are concepts that fill in, but do not replace, empty structures. Nevertheless, this is a minor problem inasmuch as his goal is to create useful concepts, metaphors, and insights for policy analysis rather than to develop theory *per se* (p. xii).

However, there is also some confusion about important concepts. Nowhere is this more evident than with regard to the state, which Jasper defines as “public officials with discretion to set policies”—an explicit attempt to distance himself from those who see the state as a set of institutions or organizations (p. xi). Yet discretion is determined in part by the state’s institutional structure. For example, he recognizes that the possibility for antinuclear elites to influence policy-making was greatest in Sweden due to a multiparty political structure (p. 235) and a policy-making system that promotes compromise (p. 228). Thus, it is hard to see



how the state can be conceptualized apart from its institutional structure. Similarly, it is difficult to understand why he maintains that the national electric utility in France is not part of the state (p. 91), although it is France's largest state-owned enterprise and such an important player in nuclear policy-making circles that observers often describe it as a state within a state (p. 80).

Regardless of these misgivings, *Nuclear Politics* will be of great interest to political scientists, sociologists, and anyone interested in technology development and energy policy, particularly now that international events have again drawn the world's attention to energy issues.

*Managing in the Corporate Interest.* By Vicki Smith. Berkeley and Los Angeles: University of California Press, 1990. Pp. 245. \$22.50.

Neil Fligstein

*University of California, Berkeley*

The rhetoric surrounding the financial reorganization of large American firms in the 1980s has focused on blaming the middle managers of those firms of being inefficient. The typical cure for the newly reorganized firm is downsizing, a euphemism that, among other things, implies firing layers of middle management. Vicki Smith's book is an attempt to see how these downsizing pressures actually effected the working conditions of middle managers in a large California bank, which appears to be the Bank of America, in the mid-1980s. During that period, the bank experienced a downturn of its economic fortunes and, as a result, began to undertake various changes oriented toward the restructuring of the firm. It should be noted that the bank has recently experienced an upturn and, indeed, is one of the more successful commercial banks.

Smith's fieldwork was conducted in four settings. First, she attended management seminars where managers were introduced to the changes that top managers proposed. Her basic argument in this chapter is that managers disliked the changes and thought that top management was making middle management bear the burden for their mistakes. In particular, she reports extensively on several of the managers' reactions to ranking current employees in order to decide who might be let go.

Then, Smith studies changes in three divisions, each of which was handed a different strategy shift by top management during the downturn: the retail business was scaled down, the systems management business was reorganized and given a greater role, and the credit card business was greatly expanded. The focus is on how middle managers in each of these divisions reacted. Her central thesis is that these managers found ways to resist top management directives and, instead, to make changes their way. The three chapters describing these reactions are the best in the book. They offer interesting insight into the work life of middle managers confronted by a restructuring corporate America.

Unfortunately, the gloss that Smith wants to read into the case studies is heavy-handed, and I think that her data are open to alternative interpretations that easily undermine her thesis. Smith romanticizes the middle managers (in spite of her claims not to [p. 198]) and portrays them as victims of top management. Her central thesis, that middle managers resisted top management reorganization attempts, is thinly supported, and most of what we are told is that these top-down changes initially created ambiguity and anger. But once the middle managers got beyond their emotional reaction to change, most fulfilled the directives that top management laid down.

Indeed, one way to read this study is that top management knew that resistance to change would occur, and that they basically got what they wanted from each of the divisions. Even Smith (p. 151) admits that the evidence does not easily support her conclusion. Indeed, the table in which she summarizes the changes that occurred (p. 153) shows that top management's directives for each of the divisions were, by and large, followed by middle managers. The only evidence for resistance (chap. 3) is taken from a skewed reading of training sessions that managers were sent to when the top management began its retrenchment.

The book is also hampered by a lack of understanding of the banking industry and the competitive pressures it experienced during the period. The second chapter of the book is a brief history of the bank during the 1970s and 1980s, but it never discusses the industrywide forces that produced the bank's strategy of expansion into related businesses.

The final chapter of the book is an attempt to discuss the issue of the role of middle managers in corporate restructuring and the issue of competitiveness. After reviewing some of the literature on flexible specialization as the solution to the problem of American competitiveness, Smith asserts that top managers must ultimately be held to blame for the decline in American competitiveness. She argues that they have formulated the short-term orientation of American firms and that middle managers and workers are the victims of this shortsightedness. She also argues that middle managers will be necessary to firms no matter what because someone will have to carry out corporate objectives.

While I am in great sympathy with this conclusion, I think her analysis in this book, to the degree that it can be generalized, has actually shown that the finance conception of the corporation succeeded in the 1980s precisely because, on average, it increased short-term profits. The problems with all of the arguments about flexible specialization is that they have failed to analyze the structural conditions that have produced the short-run orientation of managers, and they have failed to acknowledge that, in the short run, it has proved to be profitable. The Bank of America was successful by pursuing the strategy of cutting back on unprofitable operations, laying off middle managers, and expanding on more profitable ones. In other words, top management's efforts to blame middle management and restructure to increase short-term profits

worked. This does not lead to any conclusion that the workplace is more likely to be reorganized in a more humane fashion or that workers and middle managers are likely to increase their resistance to such changes. Instead, the lesson of this study is that top corporate managers do not need to worry about resistance or giving up control to either workers or middle managers: they just need to sell them on whatever it takes to preserve their jobs.

*The Transformation of Corporate Control.* By Neil Fligstein. Cambridge, Mass.: Harvard University Press, 1990. Pp. vii + 391. \$35.00.

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In *The Transformation of Corporate Control*, Neil Fligstein provides a compelling institutionalist analysis of how America's largest corporations have helped to transform the economy over the past century. Fligstein challenges Alfred Chandler's perspective, set forth in *The Visible Hand* (Cambridge, Mass.: Harvard University Press, 1977) and elsewhere. Chandler portrays markets as exogenous and powerful determinants of organizational behavior: with technological advances and expanding markets, firms and their managers responded by becoming large and decentralized in order to take over market functions, which in turn optimized efficiency and profit. Turning such conventional economic wisdom on its head, Fligstein argues that the managers of the most powerful firms, motivated and constrained by economic, political, and legal circumstances, construct "conceptions of control" (ideologies about economic survival), which in turn drive managerial strategies. It is the economic strategies of firms that drive the market rather than the other way around.

Following other institutional theorists, Fligstein employs the concept of "organizational fields" to explain the diffusion of conceptions of control across organizations: organizational fields refer to the group of competitors, suppliers, customers, and others within which there is a high degree of interaction or comparison. As conceptions of control increasingly engender success in the most powerful firms in a given organizational field, other firms in that field must copy those strategies in order to survive: thus these conceptions become increasingly prevalent and institutionalized within organizational fields. Once institutionalized, a concept of control will dominate organizational strategy until some external shock to the system precipitates a new conception of control. Because conceptions of control influence both which organizations compete and how they compete, new conceptions of control tend to restructure organizational fields. Fligstein argues that conceptions of control are powerful models and tend to remain stable until there is a strong external stimulus

for change. Thus there have been only four conceptions of control during the past century: direct control, manufacturing, sales and marketing, and finance.

Where do these conceptions of control originate? Here, Fligstein brings in the role of the state and, in particular, the law, a factor that, according to Chandler, merely reinforced market imperatives. Fligstein ascribes a much greater role to the law: he claims that changes in the law destabilized organizational strategies associated with each conception of control and were instrumental in the development of each new conception of control.

The concept of direct control developed from 1865 to 1904. During this period, firms attempted to control competitors directly through monopoly, cartels, and predatory trade practices. But because antitrust law made these practices illegal, powerful and innovative managers developed a manufacturing conception of control. This conception focused on stabilizing the production process to manufacture products without interference and was achieved through vertical and horizontal mergers and oligopolistic pricing. But this strategy failed during the Depression when the market for the newly increased production capacities dwindled. The sales and marketing conception of control developed out of the Depression crisis; it emphasized finding new markets to expand sales. Growth and product diversification, which were achieved primarily through horizontal mergers, allowed firms to pursue new markets. Renewed antitrust activity made these mergers increasingly difficult, and this led to the finance conception of control, which Fligstein claims still prevails. The finance conception of control involves the purchase and sale of other firms, without regard to product, in order to maximize short-term financial gain. Because this strategy involves diversification across industries, it escapes many of the antitrust law restrictions, which apply more to mergers within industries.

Fligstein's attention to the role of law is a key insight, and it makes his explanation for change in organizational strategy and structure considerably more compelling than Chandler's. However, the major problem with Fligstein's analysis, in my view, is that the law replaces the market as an omnipotent and exogenous force motivating, if not determining, organizational strategy and behavior. Fligstein mischaracterizes the relationship between law and corporations as unidirectional and fails to see the ways in which corporations help to construct law as well as the market.

In fact, corporations have, since before the turn of the century, played a major role in the development of antitrust (and other) law. The business community affects law through political support for judges who favor business interests and politicians who favor such judges, by lobbying Congress to reformulate the law, through academic supporters who attempt to influence judicial interpretation and legal strategy through law journal articles, and through litigation. Although Fligstein does discuss the larger political context of law during the Nixon years, he misses it

entirely in the earlier period. In explaining the transformation in organizational strategy from cartels to mergers, for example, Fligstein argues that, because cartels were unstable and illegal, "by 1896, the only legal strategy actors in firms could pursue to directly control competition was through merger" (p. 59). But the story is far more complicated. Both in and out of court, there was a continuous battle between large corporations and small producers over the scope of the Sherman Act and how it should be constructed. As shown in Martin J. Sklar's *The Corporate Reconstruction of American Capitalism, 1890–1916* (Cambridge: Cambridge University Press, 1988), the corporate community played a major role in that battle. Large corporations and their political advocates argued that the Sherman Act merely codified, but did not change, existing common law, which permitted restraints of trade that did not injure the public interest and gave the courts broad discretion to decide each case on its own merits. Small producers argued for a new construction of the rule that would impose far greater restrictions on restraint of trade. From 1896 until about 1911, antitrust law developed unevenly, thus giving no clear mandate to corporations.

Most of Fligstein's characterizations of the impact of antitrust law suffer similarly from oversimplification and failure to consider the dynamic interplay between corporations and legal development. Future research should be attentive to the social construction of law: it should recognize that law rarely gives clear mandates to organizations and should examine the mechanisms by which corporations help to define the law that regulates them. Still, *The Transformation of Corporate Control* is a significant contribution to the organizations literature and should be read by anyone interested in the historical development of corporate strategy.

*The Taming of Chance.* By Ian Hacking. Cambridge: Cambridge University Press, 1990. Pp. xiii + 264. \$44.50 (cloth); \$14.95 (paper).

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In the 19th century, the phenomenon of chance was disciplined. In *The Taming of Chance*, Ian Hacking has written about this process in a Foucaultian style: identifying the sites in which the taming of chance took place, the diverse forms and effects of this transformation, and the sometimes grim implications of the changes in concept and practice that this form of intellectual discipline produced. The message of the book is contained in its geological imagery, that the transformation in the understanding of probability took place slowly, in a different manner and at a different rate in different settings. Each country created its own distinctive kind of statistical bureaus, for example, yet these bureaus were well aware of one another and there was a strong international movement in

support of statistics collection that influenced the development of these institutions. Despite the local character of the developments, the great change, a "fundamental transition that links the erosion of determinism, the emergence of a new kind of indeterministic law, the taming of chance, and the displacement of human nature by the idea of normality" (p. 179), was inexorable and definitive.

The interest of the book for the sociologist of science is that it depicts a large-scale process of intellectual change, something that case studies, the standard form of cognitive studies in the sociology of science, do not. For the historian of social science, it shows the broader intellectual context in which the social sciences emerged but also something that is less often understood: that "moral statistics," as represented by Quetelet and the Prussian official statisticians among others, was central to the transformation Hacking describes and central to the consciousness of 19th-century intellectuals in ways that 20th-century social statistics is not. For the historian of sociology, there are other treats. Hacking presents a novel view of Durkheim and Comte, among many others, locating them in the contexts of the several contemporary "discourses" to which they contributed or on which they depended and the lines of filiation and descent they extended.

To understand what Hacking has done it is perhaps useful to place the book in its own context and line of descent. A book of this sort requires a fantastic amount of learning and familiarity with a wide range of material from diverse contexts. Hacking was a major participant, indeed leader, of a large project on the history of statistics and probability, to which he had contributed an earlier important work. This project centered on the 19th century and the idea that, during that time, there had been, as the title of the collective work of this group has it, a "probabilistic revolution" that crossed various disciplines. Hacking's book is in a way a summation of this effort, but a summation in a style appropriate to the results the members of the group obtained: that the "revolution" was complex and multifaceted, the relations between its aspects irreducible to a single narrative line, and that the nature of the revolution was crucially connected to the development of institutions and practices such as the sale of annuities, whose significance is missed out on by ordinary histories of ideas.

Hacking, accordingly, has assembled a series of short essays, with such titles as "The Granary of Science" (on the way in which constants were conceived in the science of the day, and how this influenced such persons as Quetelet), "Regimental Chests" (on Quetelet, characterized by Hacking as "the greatest regularity salesman of the nineteenth century" [p. 105]), "The Mineralogical Conception of Society" (more or less on Le Play), and so on. The peculiar fetishism of numbers is one of the sub-themes of these essays. These little essays are fun to read, display great erudition, and are often quite deep, though they are not models of clarity or completeness. Yet they draw out implications of texts that could not be drawn out any other way.

A kind of story line emerges, linking statistics with the labeling and control of deviants and showing Comte as fighting a rear-guard action against statistics in the name of determinism. "Sociology" under Durkheim became statistical yet remained "deterministic" through Durkheim's self-mystification. But these are not developed into grand theses of the sort that historians are fond of, and indeed Hacking wishes to avoid any such reductive account.

The argument is open to some objections, notably that the "revolution" Hacking describes never took place in the sense he thinks it did: that determinism and concepts of human nature (and indeed virtually all of the prerevolutionary conceptual inheritance in the social sciences) have survived, and indeed are presupposed by, the postrevolutionary usages of statisticians. The continuously troubled notion of causality in social science is one instance of the problem. There simply is no widely accepted or adequate concept of probabilistic causation in the sense of a full replacement for more traditional notions. Nor does the notion of statistical normalcy have the hold Hacking attributes to it. Hacking is too sophisticated to be caught by these objections. In writing on Durkheim and Galton, he is sensitive to, and eloquent on, the unresolved ambiguity in their usages. It is in bringing out these subtleties that the book shines.

*Inventing Accuracy: A Historical Sociology of Nuclear Missile Guidance.* By Donald MacKenzie. Cambridge, Mass.: MIT Press, 1990. Pp. xiii + 464. \$29.95.

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The capsules containing the inertial guidance systems of America's nuclear ballistic missiles are typically painted gold: they had been gray or black, but technicians did not then regard them as particularly valuable or fragile and were careless in their handling. For all that, no box has ever been blacker, more securely guarded against scrutiny. It is not just that current guidance mechanisms are protected from public visibility by the apparatus of state security. Even more telling, public discourse about the accuracy of ballistic missiles has been profoundly shaped by the assumption that increasing accuracy follows a "natural" trajectory, that inevitable realization of technological logic.

Drawing on the resources of the historical sociology of scientific knowledge (his previous work was on statistics in the eugenics movement), Donald MacKenzie rejects immanentist views of the "technological trajectory." This is no *mere* academic exercise, though it sets new standards of meticulous research and analytical sophistication for the sociology of technology. The argument against the proponents of autonomous technology is moral and political as well as academic: "To see the mundane

social processes that form the nuclear world is to see . . . the possibility of intervening in them, of reshaping that world" (p. 4).

For all the blackness of guidance systems, no technological box has ever been so successfully pried open and subjected to the minutely detailed analysis that MacKenzie offers. He takes us back to the days when it was literally incredible that an assemblage of gyroscopes and accelerometers, deriving no information from external sources, could direct a missile anywhere near its intended target. As late as 1949 the eminent physicist George Gamow was arguing, on relativistic physical grounds, that inertial guidance was impossible in principle. And MacKenzie shows us the artful practices by which we have been led to assume that pinpoint accuracy is absolutely credible.

He shows how the achievement of credibility for such systems was the simultaneous engineering of things and people in their institutions. No technology, however arcane or mundane, is outside the domain of "politics," just as no relevant politicking occurred independent of gestures toward technological possibility or constraint. Thus, there is no contradiction in MacKenzie attending on the same page to the precision machining of the ball bearings on which gyro wheels spin and to the ideology of the Cold War. The credibility of technology is inscribed within the technology of credibility.

The current accuracy of missiles was not (techno)logically dictated because its very possibility was coaxed into existence, and then actively sustained, by contingent cultural and institutional circumstances. MacKenzie indicates how accuracy as a goal, and the credibility of accuracy claims, were embedded within the complex and contested matrices of strategic doctrine, party politics, interservice rivalry, intelligence about Soviet capabilities and intentions, the professional vested interests of engineers and engineering laboratories, and, though he says disappointingly little about it, the profit environment of the military-industrial complex. The role of technology was, like that of any other element in the technosocial network, dependent on other elements: "One might say that needs are created simultaneously with the means of fulfilling them. Once the belief developed that a black-box navigator was possible, it was obvious that it was needed; before it was felt to be possible, it was meaningless to speak of a need for it" (p. 93).

The book's finest chapter is an examination of the grounds on which the current credibility of missile accuracy claims are based. No missile has ever been fired on the polar trajectory it would follow "in anger," and only one or two missiles have ever been fired "live," that is, with active warheads attached. Thus, it is entirely possible to dispute accuracy claims by noting relevant circumstances that make the "test" dissimilar from the "reality" for which missiles were designed. And, indeed, there are respectable grounds for such skepticism, though such has been the success of the missile men's credibility engineering that doubts are now rarely articulated.

MacKenzie draws his sociological framework from recent sociology of



scientific knowledge, including work by Barnes, Bloor, Collins, and Pinch. He lays particular emphasis on the "actor-network" theory of Bruno Latour and Michel Callon and the notion of "heterogeneous engineering" developed by John Law. These latter writers all dispute the legitimacy of distinguishing a domain of the "technical" or "scientific" from that of the "social" or "political." This has been an immensely influential initiative in the world of science and technology studies. It has given sociologists confidence that there is nowhere, however technical, their discipline cannot go. And no one has put this brand of sociology to more impressive use than MacKenzie, even if he has been a bit naughty in quietly setting aside the philosophical irrationalism and the ontological monism from which Latour's work proceeds.

This is a great piece of sociology and a great book, well written to the point of being gripping, superbly researched, fair, sympathetic, and, ultimately, hopeful.

*Jessie Bernard: The Making of a Feminist.* By Robert C. Bannister. New Brunswick, N.J.: Rutgers University Press, 1991. Pp. xii + 276. \$27.95.

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Of course, one welcomes a detailed and thoughtful biography of one of the most famous feminist sociologists. Jessie Bernard deserves this attention and an assessment of what her contribution has meant, not only as a feminist, but as an important figure in the history of mainstream American sociology. Unfortunately, Robert Bannister's *Jessie Bernard* is as much or more concerned with what Bernard *did not* achieve as with what she did. The introduction makes this point: she has not been a leader in the feminist movement nor in constructing feminist theory; she has not been bold or original; her contributions to sociology have not been those of a deep thinker nor a social theorist. All this niggling makes one wonder what *does* justify a biography of this figure? The author points to her age and professional prominence when she joined the feminist movement, her importance as a member of the "postfeminist generation" of American women, and her contribution in turning away from traditional sociology with its positivism and masculine biases, as part of his rationale. A final reason for the biography is that her embrace of feminism might be seen as a dramatic reversal of earlier convictions about the value of traditional theories and methods in sociology. Bernard, then, seems to be worth studying as a weather vane of the changes in sociology that the feminist movement has introduced.

In the course of presenting this view, Bannister provides a glimpse of Jewish life in Minneapolis (chap. 1) to show how he believes Bernard's Jewish heritage and early experiences with marginality influenced her concern with rationality and her desire for assimilation. The second chap-

ter on student culture in the twenties details the courtship with her teacher and mentor, Luther L. Bernard, and her consequent break with her family. The early years of marriage, the anti-Semitism she experienced in the interwar years, and the trials of life in the quasi-professional status of research assistant appear in chapter 3. Efforts to have an independent career and to separate from L. L. Bernard are chronicled in chapter 4 along with her efforts to write fiction. Here also is the story of reconciliation and the beginning of her family. Chapter 5 describes the impact of World War II and the Holocaust on Bernard's thinking. It concerns the period after the war when the two Bernards received appointments at Pennsylvania State University. In chapter 6, "Marginal Man (1951–1963)," we learn of the fifties as years of transition—Bernard as a widow and single parent, as a professional with growing national and international reputation. Her concern for conflict theory, her participation in the newly formed Society for the Study of Social Problems, and her political stance during the Cold War are all discussed here. Chapter 7 brings us to the threshold of the current feminist movement and a discussion of Bernard's important book, *Academic Women* (University Park: Pennsylvania State University Press, 1964). Bannister sees the book as a transition from scholarly analysis to more popular writing, from academic liberalism to a more radical perspective, from the ethos of professionalism to that of sisterhood in Bernard's life. He sees the book as incomplete, but presaging the issues of concern for her in future work: sexual discrimination in American society, "the female world," and the implications of adding women's perspective on the world to studies in the sociology of knowledge. Chapter 8 details Bernard's struggles as a single parent with a growing family—years also chronicled by Bernard herself in *Self-Portrait of a Family* (Boston: Beacon, 1978). The final chapter, "Feminist (1968–Present)," details the years in which Bernard became an important and beloved figure in the female world. This chapter covers the period during which Bernard wrote some of her most important contributions to women's studies: *The Future of Marriage* (New York: World, 1972) and *The Future of Motherhood* (New York: Dial, 1974). Bannister, in his final assessment, sees Bernard as perhaps better remembered as mentor and role model than as a feminist theorist (p. 221).

It is always difficult to assess the influence of one woman's career, and biography is a tricky business. Bannister gets credit for thoroughness and his seriousness in appraisal. But the picture he draws seems monumentally to miss the point. Naturally, it is difficult to portray a living icon as, certainly, Jessie Bernard has become. And Bannister has to work, not only with Jessie Bernard herself, but with all her many friends and associates looking over his shoulder. As one of those friends, I must say I find this narration a dreary one. But it is all a matter of emphasis. Jessie Bernard's career can be read as a gallant effort to contribute to social thought, to combine profession and family, to be open and adventurous when the tides of change created the opportunity to seize new ideas.

Or it can be read as all that but also as a record of failures, missteps, changeability, and superficiality. The overall tone in the book leans to the latter. Jessie Bernard's admirers, I among them, would lean toward the former. I await a more feminist reading of the career of this talented, great-hearted woman who has meant so much to those who have been cheered on in women's studies and in sociology by her example and by her work.

*Brave New Families: Stories of Domestic Upheaval in Late Twentieth Century America.* By Judith Stacey. New York: Basic Books, 1990. pp. xiv + 328. \$22.95.

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Read this remarkable ethnography and your view of American families and religious fundamentalists will be forever changed. If this book does nothing else, Stacey hopes it will shatter the image of the traditional and conservative white working-class family. Edith and Archie Bunker exist no more, if indeed they ever did. Instead, Stacey finds matrifocal, fluid extended families. Divorce is, of course, prevalent, as are all the configurations of former in-laws, ex-spouses, stepparents and half siblings that divorce creates. There are several new and important ideas offered here. First, these women portray a remarkable ability to transform divorce from rupture into a kinship resource. Cooperative ex-familial relationships are woven into rich mutual aid domestic networks. Ex-kin become fictive kin and remain important members of the family configuration. Second, Stacey argues these families have been transformed by feminism. Third, Stacy shows why even feminist women may find fundamentalist patriarchal religion alluring.

Stacey's argument can be summarized as follows. The "modern" family (based on a male family wage and an economically dependent wife/mother segregated in the private sphere) was first conceived in the industrial revolution among the white middle classes. This "modern" family did not even become an option for working-class families until after World War II. Then, the upward mobility available to white working-class men made it possible for them to forge "modern" companionate marriages. But by the time working-class families could even try the "modern" form, it had become nearly impossible to sustain. In the post-industrial era male wages could no longer support domestic wives, nor were wives necessarily content with domesticity. At the same time that the postindustrial era was robbing working-class families of their economic stability and committed male participation, the feminist revolution was changing the ideological contour of family life. The working-class women in this research were profoundly affected by feminist ideology propagated both in reentry courses for women at community colleges and

in battered women's shelters. The combination of postindustrial marital instability and feminist ideology has left working-class women poorer and more vulnerable. The death of the "modern" family only shortly after white working-class women had lived in it left them without the restrictions or protections of domesticity. Some have turned to religious fundamentalism, at least partly because traditional Christian communities preach a feminized version of love based on communication, male commitment, and sexual fidelity.

Stacey's graphic death knell of the "modern" working-class family is an important contribution to sociological discourse. Just as important, however, is her empathetic yet analytic explanation of the attraction of fundamentalist religion to contemporary American women. Stacey's research is an ethnographic study of just what happened to white working-class families in Santa Clara County, California, during tumultuous times. These families' lives may be full of pain, but they resemble not at all the families portrayed by Lillian Rubin in the 1970s. *Brave New Families* has made *Worlds of Pain* a historical document.

Generalizability is always a potential problem with ethnography. Stacey's accidental research design is the study of two women's domestic networks (real and fictive kin). Skeptics might argue that this research is simply a case study of two California women and therefore does not justify much attention. They would be wrong. Instead, the appropriate analogy is to urban anthropology. This is the study of two "tribes." Stacey has surely illustrated changes happening in Silicon Valley. How similar her findings would have been in Raleigh or Topeka is an empirical question. My guess is that the effect of feminism (or at least feminist-movement activism) on the central characters' lives would have been much less pronounced elsewhere. Yet, that alone would not have fundamentally altered the experience of postindustrialism on working-class women's lives. Feminism may have been the midwife, but the birth of postindustrialism did not depend upon having a midwife. National statistics on divorce, female labor-force participation, and attitudes toward women's rights would suggest that Americans in every region are facing similar problems.

Despite any methodological caveats, this research is a milestone that marks a new era in the study of American families. The monograph is appropriate for any undergraduate course that deals with contemporary American society (introductory sociology, social problems, gender and society, as well as marriage and the family). It should be assigned to graduate seminars in sociology of the family and to interdisciplinary family studies. If you ever have the chance to suggest just one piece of sociological research to a friend who wants to better understand the world, give them *Brave New Families*. This research is not only intellectually rich and satisfying, but also terrific to read. Do not start browsing *Brave New Families* late in the evening or you may end up reading through the night. The ethnography is simply that compelling.

*The Indian Population Problem: A Household Economics Approach.* By Bahnisikha Ghosh. New Delhi: Sage Publications. Pp. 180. \$27.50.

George Farkas  
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This nice little book is an economic demographer's introduction to Indian population issues. The focus is on female employment, childbearing, and household decision making, although mortality, literacy, male employment, and related issues are also addressed. The approach is based on the new home economics, but many of the findings and interpretations will be of interest to sociologists.

After a chapter that reviews the standard literature on the new home economics, Bahnisikha Ghosh presents a descriptive summary of Indian population trends, using census data from 1951, 1961, 1971, and 1981. Findings include a high population growth rate, which has recently shown some signs of moderation; a declining mortality rate, which still remains uncomfortably high, particularly for infants; higher female than male mortality; an improving, but still low literacy rate (by 1981, 25% of females and 47% of males were literate); and declining employment rates for both females and males. The author highlights gender inequalities in nutrition and health, education and training, and employment access, setting the stage for a focus on these in the remainder of the volume.

The heart of this study is found in the ensuing chapters on women in the labor force, sources of change in female labor-force participation, a regional case study of interrelationships among female labor-force participation, literacy, and fertility, and an econometric analysis of these issues using district-level (aggregate) data for 1961 and 1971. Findings include the following: (a) time-use data show that women work long hours at home production and as unpaid family helpers in agriculture, so that female participation rates would be much higher if these activities were counted in census (and other official) data; evidence that (b) even adjusting for this undercount of their work effort, female labor-force participation has been declining over time as males have displaced them in the work force, (c) female education and employment are negatively related to childbearing, and (d) rural India is characterized by low educational and employment opportunities for women, circumstances that keep family size high and economic growth rates low.

Not much is dramatically new in this picture of women's very secondary place in a developing, still heavily agricultural, economy. But the results are nicely presented, and the volume as a whole should be of interest to demographers generally as well as to those sociologists with a special interest in women in the developing world. The author's economic bias appears in the brief reference to a black box of "cultural-contextual factors" whenever the discussion of causal mechanisms threatens to be-

come rich and interesting. This volume could serve as a useful companion to more sociological treatments designed to open this black box.

*Ethnicity and the Economy: The State, Chinese Business and Multinationals in Malaysia.* By James V. Jesudason. Singapore: Oxford University Press, 1989. Pp. xvi + 218. \$29.95.

Judith Nagata  
York University

This dissection of the political economy of Malayasia is a pioneering work in that it is one of the first to challenge what is taken as a sensitive and unassailable issue in that country, namely the axiom of Malay political dominance and "rights." It is a serious and well-documented attempt to demonstrate that most of Malaysia's economic and political inequalities are derived ultimately from the ethnic factor, either *sui generis* or, more important for Jesudason's argument, from the manipulation of ethnicity by a strong, central Malaysian state, and that these cannot be reduced to class as some other authors have claimed. In Jesudason's view, the sacrifice of crucial economic development and market decisions on the altar of ethnic politics has prevented Malaysia from entering the ranks of the newly industrialized countries (NICs) such as Thailand and South Korea, leaving it in the company of other less economically advanced but similarly ethnically constituted countries such as Sri Lanka and Trinidad.

Historically for Malaysia, the turning point from a *laissez-faire* to an interventionist form of state capitalism followed the breakdown of ethnic accommodation between Malays and Chinese in the violence of 1969. Under a more nationalistic government, the New Economic Policy (NEP) of 1970 launched the first of a series of affirmative action policies with the goal of promoting Malay interests and creating a strong Malay bourgeoisie largely at the expense of the Chinese, while simultaneously consolidating the ethnic political base. Jesudason shows that, despite the substantial growth in strength and centralization of the Malaysian state as a basis for capitalism during the years 1970–85, the undeniable political advantages gained from the application of ethnic quotas were achieved at considerable economic cost to the country as a whole. The core of the volume consists of several meticulously chronicled case studies of the principal state enterprises, the continued expansion of the public economic sector, and the emergence of a new class of private Malay capitalists. Through Jesudason's analysis, the often contrived nature of some of these organizations is revealed, together with their economic distortions, mistakes and inefficiencies, and even corruption. Most of these major corporations initially recruited their top executives from the senior-most government bureaucrats and other politically well-connected Malays. Despite their meager experience in business, these men formed the base of

the new corporate elite and the gatekeepers of the national economy. The twin goals of commercial growth and of aiding individual and smaller Malay businessmen were advanced through a plethora of special programs, loans, training schemes, and university education directed exclusively toward the Malays.

Between 1970 and 1985, general prosperity and overall economic growth gave the appearance of success for the NEP and for the country as a whole. During this period, the Malay share of all business ownership increased from 14.2% to 30.5%.

A more realistic assessment of the situation, however, takes account of less spectacular statistics, which suggest that only about 15%–20% of Malay businesses are founded on a solid economic base and strategy. Many of these new entrepreneurs have favored quick profits and gratification, putting consumption goals ahead of long-term growth and reinvestment. Above this corps of lesser entrepreneurs a small elite of Malay millionaires has emerged, whose economic importance is probably less than their role as psychological and political symbols of the potential of their own ethnic community.

The impact of these developments on the Chinese commercial community has, understandably, been substantial and has severely curtailed both their overall investment in the public sector and their economic partnerships with Malays. In contrast to the 1960s, Chinese economic behavior is now marked by short-term goals and increased capital flight, exacerbated by a further decline in political influence.

One constituency unfortunately neglected in Jesudason's otherwise penetrating study is that of the 95% of Malays outside the privileged circle of government-sponsored businessmen and their beneficiaries, especially many rural Malays, whose fortunes over the period have declined. It is this "invisible" constituency that could well play a significant part in Malaysia's future, as part of an ethnic community divided by class.

In summary, this analysis of the role of state policy in shaping the direction of the economy and basic structures of resource production and distribution along ethnic lines, often at the expense of more "rational" processes, is instructive for macroeconomists interested in the relationship between political intervention and development in a capitalist society. The study also has messages for political scientists sensitive to the delicate balances of consociational democracies, whose success lies in the trade-offs between elites as representatives simultaneously of their class and of their ethnic constituencies, and whose arrangements can also skew the "natural" forces of the market and free trade. Finally, the volume can serve as a specific object lesson for any scholar interested in Malaysia and similar developing economies.

*Class, Ethnicity, and Social Inequality*. By Chrisopher McAll. Montreal: McGill-Queen's University Press, 1990. Pp. ix + 295. \$36.95.

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*American University*

Chrisopher McAll's *Class, Ethnicity, and Social Inequality* offers an engaging analysis of the emergence and persistence of socially constructed divisions within "inegalitarian" societies. The central theme of the monograph is that both non-Marxist and Marxist approaches to social stratification are fundamentally flawed. Each intellectual tradition tends to oversimplify social reality by imposing a static conceptual framework that posits the primacy of its respective organizing axis: ethnicity versus class. For McAll, this fallacious conceptual duality, coupled with definitional deficiencies, accounts for the theoretical impasse that currently characterizes the study of race and ethnicity. As a result, he proposes a theoretical synthesis that shifts the focus from superficial descriptions of static social categories to the larger societal forces that are responsible for the dynamic processes that underlie class and ethnic distinctions. The key, according to Mcall, is to "unmask" or "demystify" the relationship between class and ethnicity as it unfolds in specific sociohistorical settings. In this endeavor, he examines their respective social underpinnings as they relate to "the overall context of the generation and maintenance of social inequality" (p. 3).

In the first section, "Class versus Ethnicity," McAll reviews the competing scholarly traditions. The non-Marxist approach (including Weber, Parsons, Van den Berge, Dahrendorf) features the subsumption of political forces within the predominant economic relations of society. Class tends to be "situationally" defined as conditioned by the rational behavior of individuals constrained by market-based relations. In contrast, ethnic groups arise from primordial associations that are manifest in distinctive physical and cultural traits that delineate their respective social boundaries. Intergroup differences in the process of socioeconomic mobility are attributed to the innate superiority of particular groups as validated by the process of Social Darwinism.

The Marxist approach (including Althusser, Laclau, Poulantzas, Thompson, Wright) emphasizes that the dominant political relations of society determine the economic opportunities available to competing groups. The primacy of horizontally integrated social classes is posited as the historical product of expanding capitalist relations; it arises from both objective (production relations) and subjective (political consciousness) conditions. From this perspective, ethnicity is perceived as an artificial division within the working class that arises from the recruitment of new labor groups: the "masks" of ethnicity undermine class solidarity and thus obscure the fundamental political relations that determine stratification in capitalist society.



The next section, "Parts of a Whole: Identity and Inequality," explores the genesis of class stratification and its mystification in both non-market and capitalist societies. The key is the central role of "encounters" between socially bounded collectivities with opposing interests. This then is illuminated through the examination of classic anthropological ethnographies. McAll argues that ethnic identities are constructed and reaffirmed through the dynamic process of social opposition rather than simply based on immutable ascriptive differences. This leads him to contend that the visible boundaries of ethnicity, which foster intragroup consciousness, constitute a *necessary* dimension of the invisible "closed universe" of social class relations that underlie intergroup opposition. McAll labels this complex relationship the "ethnicity of class" and provides a compelling analysis of current British society from this vantage point (chap. 12).

The third section, "The Politics of Ethnicity," provocatively examines the comparative historical experience of England, Ireland, and Scotland as well as contemporary Canada. For McAll, the consolidation of the nation-state is the central factor in maintaining societal stability during profound socioeconomic change. It establishes the ideological hegemony of class and ethnicity as social constructs. This is necessary in order to conceal the unequal power relations of capitalist society that might otherwise foster class consciousness among the masses. In the process, the state obfuscates social inequality by focusing on the distinctive cultural practices of ethnic groups as well as by deflecting attention from the repressive policies that underlie the "harmonious" social relations of culturally diverse societies. For example, state-sponsored inquiries into the deplorable conditions of Native Americans tend to emphasize the persistence of cultural folkways rather than their collective struggles against federal programs of regional development. Lastly, the two chapters (15 and 16) on British colonialism and the politics of nationalism in Ireland and Quebec offer a masterful synopsis of capitalist development and the resulting ideologies of ethnic domination/resistance.

The strengths of this qualitative monograph are its conceptual clarity, originality, and articulate writing style. Like most good books, however, it is not without limitations. First, the issue of gender is not discussed in the context of socioeconomic stratification nor is the role of patriarchal social organization. The latter is problematic since capitalist societies both reinforce *and* undermine social structures of gender subordination. For instance, immigrant women from nonmarket societies may encounter greater socioeconomic opportunities under capitalism *and* experience gender inequality. Second, McAll implies that immigration is due simply to the demands of capital for cheap labor. This ignores the active agency of individuals to improve their life conditions by migrating to other countries. Third, the persistence of ethnic solidarity in capitalist societies ignores its role in improving the socioeconomic status of some of its members. This is evidenced by the success of immigrant entrepreneurs in

escaping the bottom of the labor market ("middle-man minority," "ethnic enclave"), a move that often facilitates the intergenerational mobility of their children into white-collar professions. Even so, with these flaws in mind, McAll must be commended for producing a significant contribution to the study of social inequality and ethnic relations.

*Ethnic Identity: The Transformation of White America.* By Richard D. Alba. New Haven, Conn.: Yale University Press, 1990. Pp. xvi + 374. \$35.00.

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"The legacy of the reassessment of recent decades has left scholars wary of interpreting ethnic developments in terms of assimilation, and they remain attentive to the existence of ethnic differentiation. This legacy, I believe, has obscured for many the enormity of the changes taking place among some ethnic groups, specifically those derived from European ancestries. These changes and their implications for the contemporary role of ethnicity are the subject of this book" (p. 3).

Richard Alba contends that studies of ethnicity during the 1960s and 1970s were flawed by incomplete methodologies, and that this led to a belief on the part of many scholars that "ethnic differences form a possibly permanent substructure, if not the ultimate bedrock, of American society" (p. 2). (It is noteworthy that there are no citations provided for this position of "ultimate bedrock-cy.") The purpose of this book is to correct these flaws and discuss the implications of the "enormous changes" taking place within certain ethnic groups (p. 3).

This is an exercise in macrotheory construction with micro-level data. The data are from a 1984-85 survey of 524 randomly chosen residents of the Albany-Schenectady-Troy metropolitan area in New York. The author contends that previous surveys about ethnicity have led to confusion because they failed to properly differentiate between "ethnic background/ancestry" and "subjective ethnic identity," and he sets out to correct this situation (pp. 39-40).

A central feature of this work is that separate questions are used to estimate "background" and "identity" (pp. 40-41). The author begins his survey with the question from the General Social Survey: "From what countries or parts of the world did your ancestors come?" He then adds a paternal/maternal divisor: "Was that on both your mother's and father's sides?" While the GSS then asks, "Which one of these countries do you feel closer to?" for only those who named more than one country, Alba asks all respondents, "When people ask you what your ethnic background is, what—in your own words—do you answer?" He then follows with, "Is this the way you in fact think of yourself?" And then he asks,

"How important is your ethnic background to you? Would you say it is very important, somewhat important or not important?"

My reason for presenting the items is that they reveal the different strategies for dealing with the issue of the importance of ethnicity in American society. The "pluralistic" model, critiqued by the author, takes the position that ethnic identity is an important and ignored aspect of "belonging," and that the "assimilation" model, which was earlier still, was incomplete. The pluralists followed a subjective and latent trail of ethnic identity, detecting "importance" from correlations and associations between ethnicity and social facts (pp. 20–21). Few scholars of that period would subscribe to Alba's notion that ethnicity was the "ultimate bedrock of American society." They did discern that ethnic identity did not go away as assimilation theory had predicted, and that it did have a latent and confounded effect on people's lives.

The present strategy is to ask people about these subjective matters with direct items, and it appears that many of the pluralist's findings are substantiated. For example, while Alba correctly observes that objective ethnic differences, such as intermarriage rates, are declining, subjective ethnicity is of continuing importance to many white Americans. He writes that "one surprise of the study is the absence of any decline in ethnic identity across cohorts" (p. 307). However, important or not, he also states that "the ethnic experience is shallow for the great majority of whites" (p. 297). Presumably his method enables him to know this. He further concludes that the popular notion of a third-generation return to ethnicity is incompatible with objective declines, yet he reports that "there have been hints in the analysis that younger individuals are more interested in their ethnic backgrounds than their elders" (p. 307).

The "enormous changes" are the objective declines in ethnic behaviors and the new "transformation" in the title is the emergence of the "Euro-pean Americans." The respondents are never asked whether they espouse such an identity, it is an analytic conclusion of the author. (The idea is not new. The name "Euro-ethnic Americans" was used by the U.S. Civil Rights Commission in 1979.) Alba concludes that "no longer, then, need there be any contradiction between being American and asserting an ethnic identity" (p. 319). This conclusion had been reached long ago by many people of many ancestries and even by many scholars.

Given that relatively little is written on American ethnicity using real data, this survey is a welcome addition to the fold. But the analysis does not break new theoretical ground, rather it adds to the detailing of a persistent and important aspect of our society. This study proves that ethnicity is still an important and confounding subject for social researchers to tackle. It is slippery and difficult to assess. This book provides considerable evidence that just when you think ethnicity is disappearing, it pops up in some other form as an important aspect of American identity.

*The Politics of Official Discourse in Twentieth-Century South Africa.* By Adam Ashforth. New York: Oxford University Press, 1990. Pp. xiv + 296. \$55.00.

Stephen Ellingson  
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Adam Ashforth's work on how knowledge and power are constituted and reproduced through discursive practices in South Africa demonstrates the importance of language in understanding social processes and structures. In particular, he traces continuities and discontinuities in official (read "state-sponsored") discourse about state policies and structures that address the place of South Africans in the country's political, economic, and social arenas (i.e., the "native question").

Ashforth focuses on a central problem of the South African state and economy—the necessity of using black South African labor without incorporating blacks into the political and social life of white South African society; in short, how to exploit black labor without extending citizenship rights to them. The problem is compounded because at specific periods in the 20th century the underlying assumptions of the state-capital relationship and the ways in which the state speaks of, for, and to black South Africans are challenged (e.g., by the steady growth of black trade unions in the sixties and seventies or by the 1976 Soweto uprising). One of the state's primary means of addressing this problem was to appoint special commissions of inquiry that would create new rationales for state power and for the logic underlying the specific policies of naming black South Africans, denying them citizenship, and keeping black and white separate.

The five substantive chapters of the book make up the discursive analysis of six commission reports on the native question that span the 20th century. In contradistinction to many other government commissions, these six are unique because they provided novel and comprehensive strategies for developing and consolidating state power in periods of political and social crisis centered on and caused by the native question. In each chapter Ashforth examines both content and form of the reports and places each in its historical context. He is at his best when reconstructing the state's logic or rationale for creating and controlling black labor power, black culture, history (e.g., disregarding intraracial divisions so that blacks and whites appear as homogeneous groups), territorial divisions (e.g., the homelands system), and exclusionary tactics, and when charting the various organic and technocratic metaphors of these reports. These discursive strategies form what he identifies as "schemes of legitimation"—or, to quote directly, "concrete plans of action designed to achieve the 'proper' . . . means and objectives of power" (p. 8)—which represent exploitative and repressive state practices as rational and scientific, just and necessary for the continuing development of each race and South African capitalism.

In the last chapter, Ashforth summarizes the commission reports by drawing parallels between them, identifying the similarities and differences in metaphors and schemes of legitimation, and stating the fundamental antinomy of the South African divided state: that is, the use of racial difference construed in biological and cultural terms that, while legitimating the exclusion of black South Africans from full political participation, allow society at the same time to demand their full participation in the country's economic system.

Although Ashforth's account is fascinating and his analysis of discourse well balanced between form and content, the book suffers from two weaknesses. First, although he highlights the similarities and differences between the reports, he fails to demonstrate how (if at all) the reports inform one another. Did the commission members draw on previous reports' metaphors, naming techniques, and schemes of legitimation or was each a unique and independent creation? Attending to the links between reports would strengthen Ashforth's discourse analysis.

Second, the connection between discourse and political consequences is ambiguous. In the introduction, he claims to be uninterested in assessing the impact of reports on the actual policies or laws enacted by the state (p. 11). Yet throughout the book he notes how specific reports were received and employed by the state. For example, the Fagan report had practically no impact (p. 138), and the recommendations of the Tomlinson report were largely rejected (p. 178). In the introductory chapter Ashforth states that the primary significance of the reports lies in their symbolic power (i.e., the reports symbolize the dialogue between state and civil society and help establish and reproduce the power of the modern state), yet their symbolic effects need to be demonstrated more clearly. In short, how and why are these reports critical for constituting state power if they are not generally used in policies and practices?

Overall this is a finely crafted work that identifies and documents the often hidden processes by which the state comes to speak authoritatively about social realities while silencing unofficial voices. It merits attention from scholars outside Africanist circles, including sociologists interested in culture, formation of state and civil society, power, and race.

*Sugarball: The American Game, the Dominican Dream.* By Alan M. Klein. New Haven, Conn.: Yale University Press, 1991. Pp. x+179. \$19.95.

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Peter Adler  
*University of Denver*

This is an important book. It elevates sport sociology to levels heretofore rarely achieved, showing that this subdiscipline, still in its adolescence,

is coming of age. Tackling issues as crucial as cultural resistance and hegemony, Alan M. Klein shows us how sport can be used to illustrate the tension between an industrial power and a developing nation. Klein's thesis is that neocolonialist underdevelopment is exacerbated and maintained through sport, as the American major leagues pillage the Dominican Republic and other Latin American countries of their best talent. In this slim, well-written, and highly readable volume, we learn how the game of baseball reflects and obfuscates larger cultural dimensions.

Klein, an anthropologist, spent the better part of three baseball seasons in the Dominican Republic. He interviewed current and former players, managers, administrators, historians, and fans in that country. In order to assure rapport and trust, Klein conducted English classes in the baseball academies to help aspiring players. For those looking for a highly textured, polyvocal ethnography of Dominican baseball, they will be pleased with the diversity of voices that are used throughout the text. Unquestionably, Klein's own voice is apparent as well, and with his obvious command of the material and understanding of the focal concerns of Dominican players, we relish being taken on this journey with this knowledgeable guide. In fact, through frequent use of first-person accounts, we are placed right next to the participants and have a sense of the lifeblood of the Dominican player.

In chapter 1, the reader is treated to an excellent, brief history of baseball in the Dominican Republic. One gets a sense of this country's extreme poverty, its reliance on a single cash crop, sugarcane (hence, the title), and its frequent political upheaval. Baseball's varying degrees of influence on the Dominicans, spanning its disorganized roots in the 1890s to the emergence of international play in the 1950s, rounds out this historical chapter. "The Political Economy of Dominican Baseball," chapter 2, outlines the professionalization of the sport, the establishment of baseball academies by North American major league teams, and the changes in amateur baseball brought about by the infusion of professional scouts into the country. While Dominicans are justifiably proud of their compatriots' accomplishments in professional baseball in North America, this has not come without considerable loss at home. Because of the lure of money, Dominican baseball has become increasingly dependent on the major leagues. Much like other multinational corporations that have taken advantage of cheaper labor offshore, major league baseball has seriously crimped the development of this industry within the host country. Klein shows the nature of this primarily one-sided relationship in chapter 3. In the ethnographic tour de force of the book, chapter 4, "The Wannabees," takes us inside Campo Las Palmas, the baseball academy set up by the Los Angeles Dodgers to recruit and train young Dominican players. Much like any total institution, this setting serves as a socializing agent, complete with ceremonial "rites of passage" that change the self-perceptions of the individual. The reader is taken through the camp, from the signing of a player, to his arrival, to the long, hot road trips, the isolation, and the competition and camaraderie that develop. How-

ever, the Dominicans have not simply sat passively while these changes in their game occurred, as Klein shows in chapter 5. Here, we see the nature of the resistance to cultural hegemony, with emphasis on nationalism, the role of the press, and the development of professional leagues within the Dominican Republic. Chapter 6 takes us inside Quisqueya Stadium, the country's premier baseball facility, where Klein spent much of his time observing and interviewing. We get a sense of the sights, sounds, and smells of this now-dilapidated, yet still proud, arena. The bookies and the scalpers, the vendors and the street urchins, the rabid fans and the relaxed players, all make up the scene. In the best tradition of ethnography, we have a sense of "being there." Finally, in chapter 7, Klein concludes the book with a theoretical discussion of the role of sport as an agent of cultural resistance. The Dominicans have made baseball their own game with its special flavor and ambience, and though these people are suffering severe poverty, they have been quite assertive in maintaining the cultural integrity of the game. The story is a bitter-sweet one: on the one hand, young Dominican boys are raised in the false consciousness of making it through sport, but on the other hand, they have developed national pride through the chauvinism of the local press, the internationally acclaimed winter leagues, and the unique Dominican style of play, holding their own against the more powerful industrialized nation.

Destined to take its place as one of the best critical ethnographies of sport, We recommend *Sugarball* for anyone interested in the role of sport in society, Latin American and Caribbean studies, qualitative methodology, and conflict theory.

*Literacy and Popular Culture: England, 1750–1914.* By David Vincent. Cambridge: Cambridge University Press, 1989. Pp. viii + 362.

John Boli  
*University of Lund*

A volume in the series of *Cambridge Studies in Oral and Literatue Culture* initiated by Peter Burke, this work reconstructs the framework of everyday life surrounding the expansion of literacy in 19th-century England. This book is rich in insightful anecdotes, quotations from personal diaries, and detailed descriptions of important figures and events. The scholarship is careful and impressive. In short, the book is a solid example of social history.

The six central chapters discuss the family, education, work, the natural world, imagination (literature and drama and their commercialization), and politics. Each chapter stands more or less alone, though a number of themes are developed in more than one chapter. Among the more interesting of these are the establishment of the penny post and the expansion of the railroad system, both of which, Vincent shows, had

important implications for the family, working life, and the popular press.

Another major theme is the impact of literacy on social distinctions. Vincent argues that literacy both lowered inequality (by making the written word universally available) and solidified it (by promoting class-based subcultures with distinct publications and uses of literacy). For example, the working class made heavy use of literacy for horse race gambling but rarely participated in more "refined" activities such as reading or producing literature.

As with all social histories, we must trust Vincent's knowledge of the period to justify his choice of topics in each chapter. The depth of his scholarship suggests that this trust is not misplaced. Yet the high degree of specificity makes it difficult for the reader to absorb the larger points Vincent wishes to make. The reader often feels swamped in detail and badly in need of a more general vantage point from which to view the sea of information presented in the book.

Only in one respect does Vincent venture into systematic research territory. Using a sample of 10,000 marriages taken from 10 registration districts widely (but not randomly) scattered throughout England, he presents a number of analyses in which the ability to sign one's name is interpreted as an indicator of general literacy. Despite the many well-known problems with this indicator, the consistency of his results renders them highly credible.

Vincent shows, for example, that literacy was strongly related to occupational sector in the early 19th century and spread most slowly in the lower occupational groups. Further, literacy appears to have acted as a significant social distinction in that the proportion of "mixed" marriages (involving one literate and one illiterate partner) was lower than random marriage patterns would yield. But literacy was not closely related to marital social mobility. Marriages across occupational class lines were as likely to be mixed as were marriages within classes.

While some of the findings about the registration sample are revealing, no effort is made to relate literacy to any social characteristics other than sex, occupation, and decade of birth. Why the author did not choose to aim for a broader sample with fewer marriages acts in each of a large number of districts is not explained. On the whole, the registration data play a quite limited role in the book.

As social history rather than historical sociology, the book is likely to frustrate sociologists. Vincent refrains almost entirely from theorizing. It is certainly interesting to learn about William Cobbett's radical publications, the various parliamentary acts affecting literacy, and the religious societies that promoted schooling. But we get little help in interpreting all this information.

We can nevertheless read larger implications from Vincent's rich description. The chapters on education and work make it clear that the abstract, systematic skills taught in the schools were largely irrelevant to adult life, thereby casting a cloud over functionalist theories of the expan-



sion of literacy. The chapters on work, the natural world, and imagination highlight the double-edged character of literacy—that it was (and remains) both a potential means of oppression and a potent source of conceptual and political liberation. Hence the adequacy of theories of dominant class imposition of schooling and literacy is thrown into question.

By viewing the book through various theoretical lenses, then, it becomes quite useful. A good deal is asked of the reader, as with most works of social history. But we can be grateful for the painstaking research and strong attention to detail that underlie books such as this. The heavy slogging through primary sources that produces them is more than welcome, for it enables theoretically minded scholars to get a better grip on the complexities of such multifaceted social developments as the expansion of literacy.

*The Hidden Musicians: Music-making in an English Town.* By Ruth Finnegan. New York: Cambridge University Press, 1989. Pp. xviii + 378. \$59.50.

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For most of history and in most communities the majority of musicians who make music but do not count among the “great names” are publicly unacknowledged; little is known about them. For all intention they are hidden. This book, by a professor of comparative social institutions, sets out to challenge this neglect and to uncover for the English community of Milton Keynes that music is made by and for people from many different walks of life, people for whom activities related to music take on varying interpersonal commitments in daily living, and implicate them in the institutional matrix of the community by providing them with meaning, economic standing, even rewards. Since music is discovered everywhere in the community, Finnegan’s tracing of reciprocities between musicians and their social setting invites comparing the book with social-anthropological community studies in the tradition of Paul Bohannon’s on the *Tiv* or E. E. Pritchard’s on the *Nuer*.

We learn about the “Musical Worlds in Milton Keynes,” which are made up of classical music, brass bands, folk music, musical theater, jazz, country and western, rock and pop, and music in the home and school, in churches, in clubs and pubs, and in plural worlds. The methods employed include extensive participant observation over several years in musical groups throughout the community; personal interviews with unidentified key individuals; face-to-face and telephone interviews with landlords of pubs, members of bands, representatives of the clergy of the majority of congregations, and representatives of social clubs; a postal questionnaire sent to teachers responsible for music education in all

schools; and studies of such documentary sources as newspaper releases, records of music clubs, or files of local governmental authorities charged with support of recreational activities. The distillation of data from these efforts creates a well-organized text that engages the reader, is free of jargon, and lucidly presents ideas for an interdisciplinary audience.

Sociologists find nuggets of methodological insight in every chapter such as when Finnegan encounters difficulties with applying conventional concepts to the interpretation of her data. To offer one example, she shows how the distinction between amateurs and professionals is far less specific in the real world of music making than academic distinctions would imply. She keeps the focus on the musical situation of *live* music, as performed with various personnel (some who do this full-time, others who have other means of livelihood) who, however, have a comparable level of technical facility. They are all musicians.

Perhaps it is because the book is directed to a general audience that many methodological questions are raised but not developed and connections to the classical literature (i.e., Simmel) are not made. Readers also have to be satisfied with the author's assertion concerning such intriguing subjects as "the meaning of music to performers" (p. 41) or the "social class make-up" of performance ensembles and their audiences (p. 45). Or, in another instance, readers who wished that they would learn more about the participants in musical theater find only partial satisfaction for their curiosity. It is nice to know that its performers come from all walks of life, but it would be sociologically even more informative if we learned something about how they are linked to the theater as participants on stage, in the pit orchestra, or as box office or promotion workers (p. 72). Are there any patterns of musical or extra musical socialization that would explain participation in the subset of musical theater?

By describing systems of musical enactment throughout the urban community, the book establishes itself as a major contribution to the literature. The reader clearly sees that contemporary music is part of the larger community, by recruiting both its personnel and its musical material from regional and musical traditions. The book delineates areas of connectivity among the different musical genres in the community by showing us the interpersonal networks among performers, supporters, and audiences that buttress the different styles of music, from classical to rock. For instance, some rock performers are classically trained, or brass band players become interested in the classical medium. There is considerable crossover of performers among the different traditions, from the highly formalized to the informal (p. 143).

Of particular strength is the imaginative discussion of different modes of composing music, from the literate, that is, the prior notating or mapping of instructions for sound later to be executed, to "composing through performance" as distinct from "improvisation." Similarities among the generative efforts in the variety of musical genres are analyzed. Prerational, that is nonnotated aspects of classical music making are shown, in principle, to be comparable to the oral tradition in rock

performance practice. And, for performers and audiences alike all different genres require the extension of considerable effort to acquire proficiency, though the specific modes of learning vary, and some were not available in the past (p. 138).

While the book mentions that in Milton Keynes, just as in other communities, commercial recordings set standards for local performances, the reader will not find much elaboration of the critical implications of the role of mass media for live music. Disregarding occasional shortcomings, there cannot be any question about Finnegan's success with having given us a pioneering community study of urban music making.

*Photography: A Middle-Brow Art.* By Pierre Bourdieu. Translated by S. Whiteside. Stanford, Calif.: Stanford University Press, 1990. Pp. ix + 218. \$25.00.

Douglas Harper

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This is a translation, condensation, and adaptation of *Un art moyen: Essai sur les usages sociaux de la photographie*, which originally appeared in French in 1965. The book contains several elements by Pierre Bourdieu: an analysis of the role of photography in the family life of peasants and small-town and urban dwellers, and an exploration of the "social definition of photography," including a brief essay on how different classes and groups express their aesthetic worldview in response to different photographs and photographic styles. Additional chapters by Luc Boltanski, Robert Castel, Jean-Claude Chamboredon, and Dominique Schnapper explore the sociology of the camera club, photographic practice and the fine arts, and the nature of photography as an occupation. As a collection of essays, in fact, the book is difficult to review in brief.

The English translation emphasizes general statements about photography as opposed to specific analyses of the surveys from which the data were drawn. The surveys are 25 or more years old and relevant primarily to European social life. As such the book is a curious collection. It may lead sociologists to a greater awareness of the role of photography in institutions ranging from the family to art worlds, but the book cannot, of course, be read as an analysis of the role of photography in contemporary society. In the years since the surveys were completed the role of photography has evolved both in family life and in society. In addition, the social classes and groups that are the focus of the study, such as peasants, camera clubs, and photographic "professionals," have themselves evolved to very different forms. Finally, since the original publication of the book, art worlds have largely accepted photography as a fine art. Each of these issues has been the focus of detailed study, in both Europe and the United States. Thus the book serves as a kind of baseline from which we might measure change in the symbolic life of cultures and as

an articulation of important frames around which analyses of photography may be advanced.

The book's most provocative analysis examines the role of photography in family life and is derived from surveys of nearly 700 people in Paris, a smaller city, and a village. Bourdieu suggests that "adequately understanding a photograph . . . means not only recovering the meanings which it *proclaims*, that is, to a certain extent, the explicit intentions of the photographer; it also means deciphering the surplus of meaning which it *betrays* by being a part of the symbolism of an age, a class or an artistic group" (p. 7). The peasant, for example, rejects photography as a *practice* (and in so doing, rejects one aspect of their relationship to urban life) but consumes photographic portraits done by professional photographers of their family, their rites of passage, some of their group affiliations. The urban working class makes their own family photographs with the automatic cameras of the modern age but does so in a purely instrumental way. In the discussion of the social function of family photography, Bourdieu draws heavily from Durkheim. For example, in reference to the wedding photograph, Bourdieu writes, "If one accepts, with Durkheim, that the function of the festivity is to revitalize and recreate the group, one will understand why the photograph is associated with it, since it supplies the means of solemnizing those climactic moments of social life in which the group solemnly reaffirms its unity" (p. 21). The integrative function of the photograph, however, extends beyond the moment: "The reading of old marriage photographs often takes the form of a course in genealogical science, in which the mother, a specialist in the subject, teaches the child about the connections which bind him or her to each of the people shown. She works out how the couples came about; she analyzes and compares the sphere of social connections of each of the two families; she remarks on absences, which indicate quarrels, and on presences, which do the family an honor. In short, the wedding photograph is a real sociogram, and it is read as such" (p. 23).

It is left to the camera clubs (which vary in their class composition and practice depending on their social and geographic location) to find a new meaning for photography outside of the "solemnization" of family life. In the camera club setting, photography becomes an aesthetic practice in search of legitimacy as a fine art. The primary sources of legitimacy, however, are drawn from the group process of the clubs themselves. At the time this book was written, the early 1960s, only a tiny handful of French photographers (notably Man Ray, Henri Cartier-Bresson, and Eugène Atget) had achieved status as fine arts photographers. Thus, like cinema and jazz, photography remained for Bourdieu, a "middle-brow art," legitimated largely outside of the formal art worlds of painting and sculpture.

The authors note several ironies about photographic practice that we may have come to take for granted. These include, for example, how the deskilling of photography created by automatic cameras has spread

photography throughout society and at the same time made its claim for fine arts status more tenuous.

While, as I have suggested above, the book is grounded in data that are primarily of historical interest, sociologists interested in culture will learn a great deal about the operation of a peculiar and pervasive symbolic system from this book. Bourdieu's writing (as that of his colleagues) is intricate, complex, and intellectually rewarding. The book has been edited so that much of the "evidence" lives in the lengthy endnotes, and the surveys and the data on which the book is based are not included in the English translation. The result is that the chapters read as essays that invite further research and development.

*Etched in Memory: The Building and Survival of Artistic Reputation.* By Gladys Engel Lang and Kurt Lang. Chapel Hill: University of North Carolina Press, 1990. Pp. xviii + 437. \$45.00.

Janet Wolff  
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This book, a compelling study of the lives and reputations of British and American etchers active between 1880 and 1940, is the product of historical and sociological curiosity (How are artistic reputations made?), extensive archival research, and deep personal involvement with the material. The 58 illustrations included here are all from prints in the possession of the authors. We learn from the acknowledgments, too, that one of the authors took a printmaking class in connection with this research. This passion for the subject informs the study and provides access and sensitivity to the works—qualities that are too often missing in the sociology of the arts. In many ways, this is an admirable model for that subdiscipline. It uses the best of the "production of culture" approach (investigations into social process, institutions, gatekeepers, etc.), while at the same time avoiding the narrow focus, ahistoricism, and untheoretical nature of much of this work. It eschews the pseudoscience that is a characteristic of other studies and does not attempt to disguise the openly pragmatic (and partial) nature of the research (e.g., the use of "vignettes" of lives and careers). It is clearly informed by theory (Bourdieu, Benjamin, some feminist theory), without resorting to heavy-handed theorizing or unnecessary abstraction. And, by no means the least of its virtues, it is a very engaging book.

The study is based on a close investigation into the life and work of 126 British and 160 American etchers and addresses the question of the achievement and persistence of artistic reputation. The Langs begin with a historical examination of the revival of interest in etching in the 19th century, first in France and then in Britain and the United States. The initiative and energy of key individuals was crucial. Societies, institutions, and etching clubs proliferated and consolidated the early stages of

the revival. By the 1920s, etching was in full vogue. Its demise after that is directly linked by the Langs to the stock market crash (though they also identify other factors internal to the art world, including the popularity of other methods of printing, like lithography and block prints).

The major part of the study deals with the processes through which artists were made and artistic reputations achieved. Differences in family background are discussed, as are the role of the various schools of art, apprenticeships, "lateral" moves from painting to etching, and the biographical and social factors that operated in the making of these artists. The final section of the book considers the question of the survival of reputation, suggesting the coincidence of a variety of factors, including the artist's own efforts and those of his or her survivors, networks, and association with well-known figures.

The Langs devote the penultimate chapter to the case of "the disappearing lady-etchers." As they have shown, women have been central to the revival from the beginning. Now, they and their work have virtually disappeared from sight. We know that in other areas of cultural production women are invariably pushed out of the field as the art practice itself grows in prestige. Histories of art collude in this by obliterating women from the record. It seems that this may be at least part of the explanation for the mysterious disappearance, an interpretation compatible with the information assembled by the Langs. Their own emphasis is on the cumulative disadvantages experienced by women etchers: more limited access to training, fewer contacts, and distaste for self-promotion. (The relevance of "dying at the wrong time" is a less convincing argument.) The phenomenon feminist literacy critics have sometimes called "phallic criticism" also seems relevant—the differential assessment by critics of work by men and by women, in which women's work is perceived and judged as "women's work." A review in *The Studio* of the work of Catherine Maude Nichols, in 1903, is an excellent example of this: "Her etchings are among the best that the lady artists of our time have produced" (p. 288).

Two factors that appear as incidental in the Langs' text seem to me to deserve more emphasis. Many of the successful etchers were also painters, and quite a few of those who achieved fame were also (sometimes already) famous as painters. It seems very likely that visibility in the more high-profile arena of painting was an important factor here. Right at the very end of the book, the authors confirm this. "Only eleven of our etchers ever achieved the kind of celebrity status that should have guaranteed the survival of their works and assured them a place in the pantheon on the truly renowned. All were better known for their painting than their etching" (p. 318). Second, little is said about the *style* of the work. One of the more successful of the women etchers, Orovida Pissarro, was unusual in that her work was modernist rather than traditional. Particularly in the period after 1910, I would think that aesthetic debates and preferences (of artists, critics, and audiences) and the question of modernism must have been relevant to the issue of reputation.

*The Shape of Culture: A Study of Contemporary Cultural Patterns in the United States.* By Judith R. Blau. Cambridge: Cambridge University Press, 1989. Pp. xii + 207.

Pierre-Michel Menger

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Judith Blau's new book on patterns of cultural supply in the American metropolis is original and ambitious, owing to the theoretical scope of the issues it raises as well as to its carefully designed methodology and the fine statistical work on which it relies. Challenging major sociological interpretations of cultural production and consumption, Blau investigates the relationship between social and demographic conditions and cultural supply in the 125 largest U.S. cities through a strictly quantitative approach.

The most interesting parts of the book (chaps. 2, 3, 4, and 8) show how the cultural equipment of cities, as indicated by the number of a wide range of high and popular culture institutions or events and the number of cultural workers, is correlated with the size and sociodemographic characteristics of the resident populations taken as indicators of cultural demand level. The main findings are surprising. At the metropolitan as well as at the regional level, although the largest cities are better equipped with elite arts institutions than are smaller cities, high culture is quite uniformly distributed, if one takes into account numbers of organizations relative to the population size. For example, per capita ratings give the first rank to Augusta, Georgia, for the number of major orchestras, to Charleston, South Carolina, for opera companies, or to Providence, Rhode Island, for highly rated museums, but to New York for only a few other major elite arts supply indicators. Of course, and this is a clearly emphasized limitation of this kind of computation, such comparisons and rankings do not take into account the quality or size of the institutions. In fact, they correspond to a kind of potential consumer point of view when facing ticket availability or hall congestion problems with no respect to reputation and worth of the performances and shows. Ubiquitous high-culture supply contrasts with the relative concentration of commercial, popular culture in major centers and with regional variations in its spatial distribution.

Statistical correlations with socioeconomic and educational characteristics of the populations provide another surprise: popular culture and elite culture are governed by nearly the same conditions; that is, low and declining levels of class inequalities favor the institutional expansion of both cultures. These and several other findings lead Blau near to Herbert Gans's thesis of the emergence of a new taste culture, a middle-class culture.

Such results run counter to most surveys showing the significance of class inequalities for cultural demand—in terms of actual consumption and preference patterns—as well as for the distinction between elite and

popular arts. Blau's own findings lead to contradiction on one important point: if one represents the level of cultural supply by the relative number of artists living in the cities, the picture becomes very different since "places with notable affluence, considerable poverty and great inequalities attract artists" (p. 167), especially performing artists. My suggestion is that these challenging and sometimes contradictory findings stem from an arbitrary and at least partially problematic assumption: the "societal level," to which Blau refers in order to resolve conflicting views on the relationships between society and culture, leads her to identify potential cultural demand (i.e., the size of the whole city population) with actual demand, *ceteris paribus*, as stated or assumed several times. This identification is clearly confusing in the case of high culture. In her very suggestive fourth chapter, the author herself evokes a "threshold" or "critical mass" effect: the relation between city population and the number of suppliers, while linear in the case of popular culture, is multiplicative for elite arts institutions. In other words, popular culture depends directly on market forces and consumer sovereignty, when high culture, much less consumed, needs a larger pool of potential consumers to develop. National and local cultural policy investments and the coordinated action of political and economic elites tend to limit the effects of this gap between potential and actual demand for the supply of high culture resources. Though mentioned several times, such intermediate factors are inaccessible to the methodology adopted and are thus undervalued.

The remainder of the book (chaps. 5–7) takes us inside the cultural organizations through comparative and quantitative analyses of their internal configurations and of their relations with their environments. Indicators such as age, number of professional administrators, ratio of professional artists to amateurs, and diversity of financial support sources are correlated with the size and specific type of artistic organization. Exploration of qualitative aspects of performance such as popularity, productivity, degree of innovation, or style differences helps to emphasize the distinctive organizational features of various institutions and markets (theaters, museums, popular music) according to the specific content of the supplied goods and services and the level of market pressures. Yet several results are obvious or thin, bringing into light some limitations of the chosen methodology when internal and qualitative dimensions are studied. On the whole, this book is often intriguing and sometimes provocative, but constantly stimulating, which gives a good idea of the theoretical and methodological scope of the present development of the sociology of culture.



*Tongues of Fire: The Explosion of Protestantism in Latin America.* By David Martin. Oxford: Basil Blackwell, 1990. Pp. xiii + 352. \$39.95.

*Is Latin America Turning Protestant? The Politics of Evangelical Growth.* By David Stoll. Berkeley and Los Angeles: University of California Press, 1990. Pp. xxi + 424. \$24.95.

Harvey Cox  
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The recent startling growth of Protestant religious movements in Latin America has produced a barrage of impressionistic analyses, much of it highly polemical. Whatever its causes, the fact of the explosion itself cannot be doubted. The membership of theologically conservative Protestant groups has quadrupled in the last decade in such countries as Bolivia, Colombia, Guatemala, and Honduras. There are 22 million Protestants in Brazil (out of a total population of 138 million). Protestants played an active role in the coalition that elected Alberto Fujimora president of Peru. El Salvador and Honduras could easily have Protestant majorities in 20 years. Significantly, the main source of this exponential growth is not the standard brand Protestants but the pentecostals who now account for nearly four out of five *Evangelicos* (the generic name given to all Protestants in Latin America) on the continent.

David Martin's book is both a superb description and a persuasive interpretation of this phenomenon, knowledgeably grounded in religious history and informed by a variety of on-the-spot anthropological studies. He skillfully places current developments both within the centuries-long rivalry between Anglo and Latin civilizations and also within the dynamic interaction of center and periphery. He sees pentecostalism as an American "periphery religion" that is succeeding so spectacularly in Latin America it may one day become the core culture there, just as nonconformists, once a peripheral religion in Britain, eventually supplied the core culture of North America.

This is a book that takes culture and cultural change seriously as something more than merely derivative of structure. Pentecostalism presents itself as apolitical, but for Martin it is an anticipation in the cultural sphere of new values and identities—egalitarianism, self-discipline, spontaneity—that could eventually shape the whole. It seems to appeal to people who are already on the move—geographically and/or socially—and then facilitates further movement. Unlike either Roman Catholicism or mainline Protestantism it relies almost entirely on indigenous pastors and spreads largely through kinship chains. Since it rejects hierarchically mediated forms of faith it instills in its adherents a deep suspicion of all hierarchies, including the secular ones, thus shaping a new personality type.

Pentecostalism has another powerful attraction. Its emphasis on dreams, visions, oral tradition, and religious healing allows people to tap into the archaic world of the spirits that traditional Protestantism spurns or warns against. But unlike folk Catholicism it does this while releasing its participants from the often decadent and sometimes corrupt fiesta and ritual kinship systems. In their place it supplies the limbic catharsis of ecstatic worship and a supportive network of new *hermanos* and *hermanas*.

But why has Protestantism, and pentecostalism in particular, grown faster in some countries than in others? Martin suggests a plausible answer. Protestantism takes hold where a certain crumbling of the old Catholic order has begun but where radical secularization has not yet won the day. He demonstrates this with well-documented case histories from Brazil, the southern core, Ecuador, Central America, and Mexico (with a chapter on "instructive parallels" from South Korea and South Africa). As a sociologist, Martin is refreshingly nonreductionist in his treatment of the specifically *religious* dimensions of pentecostalism. In a section entitled "Re-formations" he describes healings and "speaking in tongues," and the songs and stories of the movement, pointing out how, in contrast to the older Protestantism's emphasis on literacy, pentecostals celebrate the tactile, the vocal, and the participatory elements of worship.

For two decades now the contest between liberation theology and its conservative Catholic critics has attracted most of the attention of observers of Latin American religion. Now, burgeoning pentecostalism triangulates the picture. Liberationists often see it as a rival for the same pool of recruits. For integralist Catholics it is a dangerous heresy. But both must also feel a certain ambivalence about the new boy on the block. From a liberation perspective, these people have boldly opted out of at least one part of the old oppressive system, and if they do not yet seem politically "conscienticized," there are signs of hope. They are on "social strike." The integralists may be secretly happy that these religious malcontents have at least taken their complaints outside the already troubled institutional church. Martin believes that the apolitical stance pentecostals present may be in part a survival strategy, but he insists that wherever "free social space" is created, larger shifts in the landscape are not far behind.

This excellent book is marred by a few editing errors, but it is readable throughout and seasoned with an engaging dry humor. Read along with David Stoll's *Is Latin America Turning Protestant?* which focuses more on the political side of the story, it supplies an indispensable introduction to what could turn out to be one of the most important religious upheavals of our time.

Stoll's book, with its jacket illustration of Jimmy Swaggart preaching in the Plaza of the Revolution in Managua in 1988, also argues that what its critics label "the invasion of the sects" is more complex than first meets the eye. After charting the startling scale of evangelical growth, he describes the current pastoral crisis in Latin American Catholicism,

then devotes the remaining chapters to a thorough and carefully researched series of case studies and descriptions of regional developments. He closes with a persuasive effort to reinterpret the Protestant boom not as a foreign invasion but as a genuine indigenous evangelical awakening.

More than Martin, Stoll relates Latin American Protestant growth to recent religious developments in North America, such as the decline of liberal protestantism, the emergence of a more socially concerned evangelization, the appearance of "parachurch" movements outside the regular denominations, the rises and falls of the television ministries, and the ups and downs of the religious Right. Although he recognizes the massive role of North American money, organizational skill, and technology in the spread of conservative Protestantism south of the border, he firmly rejects any conspiracy theory. Rather he believes U.S. political conservatives like Oliver North have tried to exploit an authentic awakening for their own extrinsic purposes, and one of Stoll's goals is to warn the evangelicals against this cynical misuse of their movement.

Three of Stoll's case studies are particularly informative. In one chapter, "The New Jerusalem in the Americas," he charts the short but spectacular career of the (so far) first evangelical dictator, General Efraim Rios Montt of Guatemala, a leading member of the Word Church, headquartered in Eureka, California. After seizing power in 1982, he preached to the nation over radio and television every Sunday night, decrying the moral decay of the society, while his army, determined to eliminate all guerillas, burned Indian villages and decimated their population in the western provinces. Rios frightened many of his born-again brothers and was ultimately toppled by another military coup, leaving many Guatemalan evangelicals disturbed by what he had done. But through it all, Protestantism in Guatemala experienced the fastest growth rate on the continent.

Stoll's account of the intricacies of Protestant-Catholic interaction in Nicaragua during the bloody Contra war is also richly informative (though published before Violeta Chamorro's electoral victory). He also delves skillfully into the controversial work of an extremely influential group called World Vision, focusing on its program in Ecuador. This is an important topic because independent, self-financed, nondenominational development agencies such as World Vision are playing an ever larger role in Latin America and, like the evangelical movement as a whole, they are often internally complex, with conservative, moderate, and "liberationist" wings struggling for predominance.

Neither Stoll nor Martin hazards many predictions. Both note that the extended-family based orientation of pentecostal and evangelical churches gives them a staying power the sometimes more issue-oriented Catholic base community lacks. Both books appeared before a recent research report from Brazil that shows considerable numbers of Catholic base community participants defecting to pentecostal congregations. Observers on the scene also note what they call a certain "pentecostalization" of these base communities in their styles of worship and religious

discourse. Both writers could have made more of the younger generation of evangelical leaders who are determined to keep the fire burning while shedding their image of reactionary politics and undue dependence on North America.

Finally, neither Stoll nor Martin, in my view, draws a sufficiently sharp distinction *between* evangelicals and pentecostals. The latter, according to some scholars, notably Karla Poewe of the University of Calgary, must be understood as part of a worldwide change in the very nature of religion, away from cognition and propositional belief and toward experience and imagination in the spiritual life. Will this powerful new current relate itself positively to liberation theology eventually, thus becoming part of a massive new religious ground swell in Latin America? It is too early to predict, but stranger things have happened.

*The Politics of Demonology: The European Witchcraze and the Mass Production of Deviance.* By Jon Oplinger. Selinsgrove, Pa.: Susquehanna University Press; London and Toronto: Associated University Presses, 1990. Pp. 311. \$39.50.

Nachman Ben-Yehuda

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Basing his view on functionalism and emphasizing the concepts of moral boundaries and moral landscapes, Jon Oplinger develops a theoretical model to explain the "mass production of deviance" (pp. 29–33). Using Elliott Currie's work, Oplinger makes what he calls a "self-evident statement" within which he finds "four categorical variables" (pp. 29–30) that he uses to develop eight specific hypotheses (pp. 31–32). The scheme is too complicated to be presented here, but its acceptance depends on accepting the theoretical background on which it is founded.

The book offers a few rather fascinating and easy to read descriptive chapters about cases of "mass production of deviants"; the European "witch craze," the Salem witch-hunt, the Red scare, the McCarthy era, the Great Purge (in the Soviet Union), the Holocaust, and, in the last chapter, the U.S. government's treatment of Americans of Japanese descent after the attack on Pearl Harbor.

However, for a 1990 publication, this work presents a set of problems, both in theory and in its empirical treatment. The theoretical base presented in this book is rather unclear, partly because the author both commits himself to and shies away from central conceptualizations. For example, Oplinger relies on such concepts as moral boundaries and moral landscapes. However, the discussion of moral boundaries is short and shallow. The concept of moral landscapes is unclear, and, despite its centrality, the author suggests that it be used merely as "a root metaphor" (p. 28). Likewise, while Oplinger's claim that cultures manufacture deviance on a mass scale is very central, he also suggests that this

manufacture of deviance should be thought of as a "sensitizing concept" (p. 18). While Oplinger seems to rely on functionalism for developing his conceptual scheme, it is not always clear to what extent he is committed to functionalism. Moreover, his discussion of functionalism tends to ignore the major criticisms leveled against this approach and the more recent developments in neofunctionalism (e.g., Jeffrey Alexander, Michael Faia). The discussion of conflict theory (p. 25) is likewise shallow and does not differentiate among different types of conflict. Oplinger views deviance as "a . . . social status that is determined by those in power" (p. 24). Hence, while "power" is an extremely important variable in Oplinger's work, the book lacks any useful discussion of the concept. Depending on the approach one takes to a sociological characterization of power, it can be shown that power is negotiable and hence the "powerful" are not always able to "deviantize" others. Sometimes the "powerless" can negotiate and manipulate processes of "deviantization" (e.g., see the history of prohibition and, more specifically, Joseph Gusfield's work). These are not small oversights on Oplinger's part. Relying on old-fashioned functionalism (i.e., "society does this or that") and on an overgeneralized and undifferentiated concept of conflict creates major theoretical flaws in the book.

The rather strange tendency in the book to ignore new, relevant, and important works is not limited to the area of functionalism; also ignored are works related to the persecution of deviants (i.e., Albert Bergesen's work), major and relevant works in social control theory (e.g., Stanley Cohen, Donald Black), the very relevant works on moral panics, collective behavior, and, most important, constructionism (e.g., Joel Best, Erich Goode). He ignores even more specific works that are relevant to the cases discussed (e.g., Richard Weisman's work on the Salem witch-hunts). To say that the review of the literature is sloppy is, perhaps, to call attention to a minor fault, but some better knowledge and understanding of recent works in relevant areas could help the author create a much better and more distinctly sociological product. Thus, the overall result of the effort to develop a theoretically sound sociological conceptualization in this book leaves much to be desired. An opportunity has been lost.

The European witch craze can be used to provide a few illustrations. Currie implies that the confiscations of property from those accused in witchcraft (during the European witch craze) played a major part in the zeal of the prosecutors. Oplinger tends to accept this claim despite the fact that Erik Midelfort's empirical work does not corroborate this. Oplinger tends to invoke anthropological explanations in the context of the European witch craze. However, the European society where the witch craze occurred was very different from the societies investigated by anthropologists. While Oplinger maintains that the "public" was agitated (p. 42) or anxious (p. 54) during the period of the witch craze, no explanation is provided as to why, or why such anxiety would explain the specificity of the persecutions (the same criticism about specificity is

true for the other cases). On page 60 the author claims that the Spanish Inquisition "did not produce a vast number of deviants." The author should be reminded that around 1492 all Jews were expelled from Spain—as deviants. There are a few other examples like this (e.g., the Holocaust), which suggest that the historical reality was far more complex than Oplinger's description allows and that in compressing these cases accuracy and reliability may have been sacrificed.

Second, the logic of comparison is a most troubling issue. The method of comparative sociology is very powerful and suggestive but also one that can be abused. Making a comparison requires some compelling arguments regarding the nature of the objects chosen and the rationale behind the specific selection. Thus, it is not too difficult to realize that there is some logic behind attempts to compare the European witch craze to the Salem witch-hunts and other cases of witch persecutions. However, comparing the Holocaust with the Red scare, or putting in one basket the Soviet's Great Purge with the detention of Japanese Americans during part of World War II leaves one with some questions to be asked, especially regarding the details.

The comparison brings forth some problematic issues inherent in this book. The Holocaust can, perhaps, be thought of as one monstrous example of genocide. However, Oplinger virtually ignores almost all the relevant literature on genocide. There is a very bitter argument whether the Holocaust is at all comparable to other events (and, if so, in what sense). Oplinger chooses to ignore this rather important debate too. Moreover, the comparison puts religious, political, and cultural persecutions together in the same category, without even attempting to find out the sociological meaning of these differences. Oplinger seems to be quite aware of the problems (p. 33) but states that "the differences are not at issue" and suggests that the cases he uses, and others besides, "share certain underlying features." This, I find, is a weak statement. Looked at from a very wide-angle lens, from a great distance, many "things" may look alike. However, details, accuracy, and reliability are crucial issues for (social) sciences. In many of these details, and in some very major issues as well, the rationale for comparing the cases is far from being clear or persuasive.

Overall, this is an interesting, easy to read, provocative, suggestive, and thought-provoking book. The late 1960s or maybe even the early 1970s would have been a better time to write and publish it. The book virtually ignores important and relevant developments in theory, especially in neofunctionalism, conflict theory, social control, and, most important, constructionism. While the cases are presented in an interesting, readable, and challenging way, the details are sometimes lost in the broad and sweeping presentation, and the logic of the comparison leaves much to be desired.

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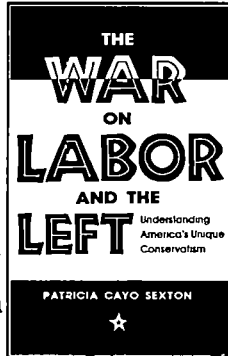
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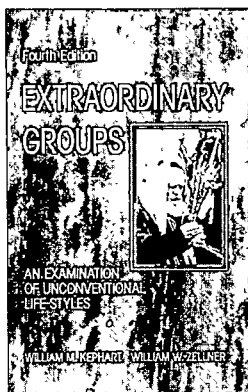
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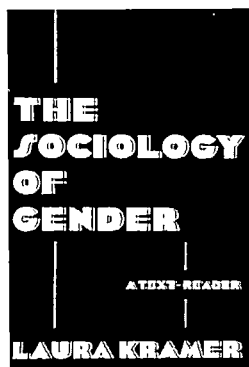
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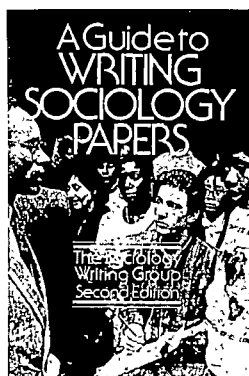


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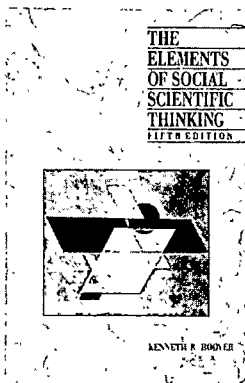
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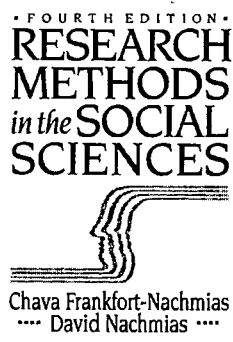
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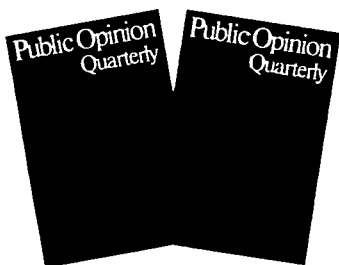
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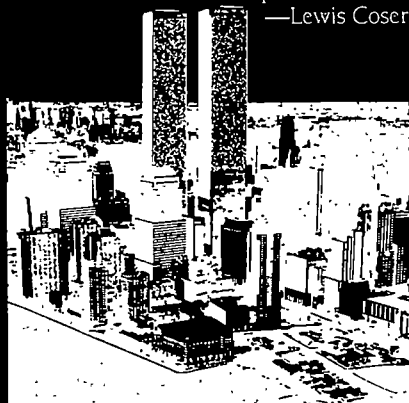
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## IN THIS ISSUE

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S. PHILIP MORGAN is associate professor of sociology and member of the Graduate Group in Demography. His research focuses on the U.S. family and family change. His November 1991 article in *Demography* (written with R. Chen) describes recent U.S. trends in childlessness and delayed childbearing. His book *First Births in America* (Berkeley: University of California Press, 1988), which he coauthored with R. Rindfuss and G. Swicegood, is about changes in the timing of parenthood in the 20th century.

MICHAEL W. MACY is assistant professor of sociology at Brandeis University. His most recent work applies social learning theory to the emergence of a "critical mass" in the production of public goods. A work in progress aims to bridge the divide between "consequentialist" theories of collective action and "interactionist" theories of collective behavior. Others of his recent articles include a critique of Marxist value theory and a study using cross-national survey research on the ideological alignment of the "new middle class."



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Davis, James Allan. 1978. *General Social Survey, 1972-1978: Cumulative Data* (MRDF). NORC ed. Chicago: NORC. Distributed by Roper Public Opinion Research Center, New Haven, Conn.

Davis, K. 1963*a*. "Social Demography." Pp. 124-37 in *The Behavioral Sciences Today*, edited by Bernard Berelson. New York: Basic.

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Moore, Wilbert E., and Arnold S. Feldman. 1960. *Labor Commitment and Social Change in Developing Areas*. New York: Social Science Research Council.

Sanford, Nevitt, ed. 1962. *The American College*. New York: Wiley.

U.S. Bureau of the Census. 1970. *Census of Population and Housing 1970, Summary Statistic File 4H: U.S.* (MRDF). DUALabs ed. Washington, D.C.: Bureau of the Census. Distributed by DUALabs, Rosslyn, Va.

Weber, Max. (1921) 1968. "Society's Problems." Pp. 12-16 in *Economy and Society*, edited by Guenther Roth and Claus Wittich. New York: Bedminster.

(Rev. 7/91)

# Conflict Management, Honor, and Organizational Change<sup>1</sup>

Calvin Morrill

*University of Arizona*

How do top managers of a large American corporation manage conflict among themselves? This article investigates intracorporate executive conflict management in a Fortune 500 manufacturer via ethnographic methods. It focuses on the links between executive conflict management and widespread innovations in (1) top managerial formal structure and (2) hostile takeovers and their symbolic imagery. More specifically, the article focuses on how these innovations disrupted the traditional social structure and "rules of the game" among top managers. The resulting new "culture of honor" suggests several implications for the study of managerial uncertainty, inertia, accountability, and control in contemporary American corporations.

The grey-suited managers directing large corporations seem unlikely practitioners of elaborate honor ceremonies. A top manager from Kanter's (1977, p. 48) study of a large corporation, for example, portrayed his executive offices as a "brain center, but there is no activity. It's like an old folks' home. You can see the cobwebs growing. A secretary every quarter of a mile. It's very sterile." Moore's (1962, p. 127) observations on executive conflict echo these sentiments: "Let us understand, this is a discussion among gentlemen, not a barroom brawl. The decor and the demeanor require restraint. This is civilized combat, not the law of the jungle." The images evoked by Kanter, Moore, and studies

<sup>1</sup> A junior fellowship at the Center for Criminal Justice, Harvard Law School, and the Program in Law and Social Sciences of the National Science Foundation (grant SES-8508349) provided financial assistance for this research. Donald Black, Donald Cressey, Keith Morrill, Ruth Morrill, Laura Nader, Alessandro Fizzorno, Harrison White, and personnel at "Playco" provided invaluable comments and support during the execution of the fieldwork. I thank William Bailey, M. P. Baumgartner, Donald Black, Michael Burgoon, Mark Cooney, Steve Cornell, Donald Cressey, Mustafa Emirbayer, Paul Hirsch, Allan Horwitz, John Johnson, Rosabeth Moss Kanter, Michele Lamont, Eric Leifer, Michael Musheno, Dirk Scheerhorn, David Snow, James Tucker, Harrison White, members of the Social Organization seminar led by Walter Powell and the Qualitative Methods graduate seminar, both at the University of Arizona, and three anonymous *AJS* reviewers for helpful comments on earlier drafts of the paper. I also thank Barbara McIntosh for help in preparing the manuscript.

by Dalton (1959) and Macaulay (1963) suggest a buttoned-down culture in American corporate suites.

Such an expectation might accurately characterize corporate executive suites prior to the 1980s. Since that time two significant developments have disrupted the traditional social structures and "rules of the game" among top management: (1) widespread restructuring of corporate management, particularly experimentation with "matrix" management; and (2) the diffusion of hostile takeovers and their symbolic imagery. In this article I explore the impacts of these developments on top managers through the symbolic reframing of their conflict management in a large corporation.<sup>2</sup>

At a theoretical level, the article illustrates the utility of cross-cultural theories of conflict management for understanding behavior in organizational contexts. The study also suggests the *concurrent* importance of both social structural and symbolic factors enacted either purposively or conjuncturally in explaining organizational change. In this sense, "structure" and "symbolic systems" interact with each other and exist as overlapping social phenomena: social structure cannot exist without symbolic systems, which individuals use to make sense of, maintain, and change social structure, while symbolic systems cannot exist for long without "plausibility structures," which root symbols in behavioral patterns (Berger and Luckman 1966). Central in this process is what Thompson (1967, p. 148) views as a crucial paradox in complex organizations: the desire for flexibility and certainty to occur simultaneously in administration. In the corporation under study, ideas and practices related to matrix management appeared as a way to achieve administrative flexibility by loosening authority relations. The adoption of the matrix, however, led to great internal uncertainty within a wider environment of uncertainty caused by the advent of hostile takeovers. At the same time, the matrix created the structural conditions conducive to highly ritualized conflict management framed in a code of honor inspired by imagery associated with the rise of hostile takeovers and local imagery associated with the corporation's products. It is this code of honor that allows executives to make sense of the turbulent American business world born of the 1980s. As I will argue at the conclusion of the paper, this ritualized conflict management may also increase organizational inertia at the executive levels, control by top managers over executive subordinates, and executive accountability, but such conflict management raises doubts about the efficacy of economic theories of the firm. I begin with a look at executive social organization and conflict management prior to the

<sup>2</sup> Conflict management refers to any social process by which people or groups handle grievances about each other's behaviors (see generally, Black 1984, 1990; Nader and Todd 1978).

1980s at Playco, my pseudonym for the organization I studied. Data collection and analysis methods are described in Appendix A. Appendix B contains a glossary of terms used by executives.<sup>3</sup>

#### EXECUTIVE SOCIAL ORGANIZATION AND CONFLICT MANAGEMENT PATTERNS, CIRCA 1975

In the mid-1970s, Playco manufactured several lines of toys for small children. Its executive core consisted of 21 top managers organized into several departments. There were only three ranks: vice president, senior vice president (who headed departments), and the president/chief executive of the firm. A long-time executive described the executive levels at Playco as "staid" and "laid back."

The substance of conflict during this period focused around four broad issues: diversification of Playco's product lines, production scheduling, the gradual removal of the founders of the firm from central sources of power (one chaired the board of directors, while the other occupied the presidency), and what several executives referred to as "personality conflicts between individuals." The following accounts by two executives who have worked with Playco since the 1960s summarizes the tone of executive conflict management at the firm in the mid-1970s:

*Account 1.* Let me give you a couple of examples. We used to have conflicts between departments: engineering and design. In those days, the president always settled them, when the two department VPs [vice presidents] couldn't get a grip on it. But it was all done very quietly, behind closed doors. You wouldn't dare shout at one of your colleagues. It was a different world then. There was also a lot more discipline within the departments. I remember being a young VP and working for this complete horse's patoot of a SVP [senior vice president]. I would never even think about challenging him the way VPs challenge their SVPs in the firm today. I had to change in the eighties. I had to get with the game myself; get more

<sup>3</sup> Few ethnographies exist that focus on *corporate executives*. Moore's (1962), Macaulay's (1963), and Kanter's (1977) studies do not exclusively focus on executives, but provide broad support for the staid characterization of executive suites prior to the 1980s. Morrill's (1989) ethnography of executive conflict in a Fortune 100 bank in the 1980s also provides a point of comparison (noted in the text below) between corporations involved and not involved with hostile takeovers and matrix management. Studies of executives by business scholars are less useful for my purposes because of their focus on normative concerns relevant to managerial practice. The most-cited studies in the business literature are Carlson's (1951) study of work activities by Swedish executives in which subjects keep daily dairies; Mintzberg's (1973) "structured observation" of the individual activities of six top managers in different organizations; and Kotter's (1983) observational and self-report study on the "secrets" of 15 "successful" executives drawn from manufacturing and nonmanufacturing organizations. Martynko and Gardner (1985) provide a useful review of these works and those related to observational studies of middle and lower managers.

aggressive, take people on in public. It took a while. I sometimes think it hurt me; not getting with the game until a few years ago.

*Account 2.* The only public conflicts I remember happened when the founders bowed out of the firm in the early seventies. There were some donnybrooks over that. We [the executive and two other senior executives] were hired to help them run this itty bitty firm that had grown into a multinational corporation over [a] 30-year period. We wound up running the firm. Hey, I sat around here grumbling about [the founders] for years before anything came out in the open. The same thing with personal issues I had with colleagues. All of the stuff you see on a daily basis around here now just didn't happen back then. Divisional managers [senior vice presidents] kept their shops clean; people kept to themselves. Sure, there were problems, conflicts between top execs. But it got settled quietly.

Other executives and consultants working in or with Playco prior to the late 1970s echo these sentiments. Conflict management took particular forms according to its downward or upward direction as in other unitary managerial hierarchies (Dalton 1959; Morrill 1989). Conflict management among Playco executives also exhibited certain ceremonies (Trice, Belasco, and Alutto 1969) marking its occurrence and conclusion. A consistent ritual was that of removing a conflict from the public view and handling it as quietly as possible "behind closed doors" as the executive noted in account 1. When approaching a superior in a conflictive situation, subordinates tended to make special appointments to see their superiors alone and tended to rehearse the presentation of their grievances. More often than not, such presentations were "cut off" by superiors who settled the matter unilaterally after briefly listening to their subordinate's opening remarks. The superior would then return his or her subordinate back to their regular duties to "work out the details of the solution." Superiors with complaints against their subordinates would usually call those subordinates into their office for a quick meeting to "clear up problems." Although some executives reported "rehearsing" their presentations to subordinates, most argued that such actions tended to occur without much thought about how they would specifically present their grievance. Accounts of peer conflicts contain consistent references to the private conflict management as well. The next two sections of this article demonstrate that the unity of command and the patterns of conflict management associated with it changed dramatically by the mid-1980s.

#### EXECUTIVE SOCIAL ORGANIZATION: 1984-87<sup>4</sup>

##### The Corporation

Playco manufactures computers, electronic learning aids, and electronic toys and games for children as well as owning publishing houses, movie

<sup>4</sup> Material from the 1980s is presented in the ethnographic "present."

studios, computer manufacturers, small chemical companies, and numerous other subsidiaries. Forty-three executives (holding titles of vice president or above) and some 3,000 other employees work at its headquarters. The company is publicly owned.

The majority of Playco top managers are white males between the ages of 35 and 65; they hold college and graduate degrees and are married with children. Women make up nearly one-fifth of its executives (cf. Kanter 1977, pp. 29–68). About one-third of the executives in the company have 15 years of service or more, one-third have 10–15 years of service, and the rest have worked for the company less than 10 years. Executives based at the company's headquarters are rarely transferred to other Playco facilities. Executives at headquarters, however, do transfer duties.

Executives estimate that Playco replaces between 40% and 60% of its products every year (slightly lower than the firm's replacement rate in the 1970s). On any of their regular 10-hour work days, top managers from the same departments can be observed talking with one another in hallways, elevators, parking lots, over the phone, and in the lobbies at headquarters. Most of these conversations last less than three minutes. Colleagues who do not share the same department tend to confine their communication to frequent (three of four per week) meetings, or, in the absence of meetings, had sparse interaction.

### The Executive Matrix

Playco has eight departments—operations, research and development (hereafter R&D), marketing, sales, finance, administration, engineering, and product planning—crosscut by seven product teams. This arrangement forms a product  $\times$  function matrix (Davis and Lawrence 1977) in which product teams and functions are formally equal in decision making in the organization. The “office of the president” represents the highest reach of the executive ranks and has four offices: the presidents of domestic and international affairs, the chief executive officer (CEO), and the chairman of the board, who is infrequently involved with the daily affairs of the company. Departments contain two executive ranks: vice president and senior vice president.

Product teams are responsible for the company's products from conception to distribution. Some teams are responsible for a single product, such as a best-selling learning aid; other teams are responsible for an entire product line, such as games for children six to nine years old. Vice presidents of marketing are typically product team leaders, and one representative from each of the company's departments (except administration and finance) sits on each of the product teams. In most instances,

executives fill out the membership of a product team, although "managers," the rank just below vice president, may also be included. Several factors determine the membership of product teams: an executive's reputation, task expertise, friendships with product team members and leaders, and individual interest in becoming a member of a particular team.

Playco vice presidents typically report to a senior vice president and a team leader. Senior vice presidents report to one of the presidents or to both a president and the chief executive officer, and they may sit on a product team in which they are also a "follower." An example of such a situation would be when a marketing vice president leads a team composed, among other executives, of a senior vice president of engineering or sales. Both of these situations create extremely uncertain lines of authority and can lead to conflict (see the next section for more information).

Similar ambiguities exist in executive evaluation. Although most top managers in business settings appear immune to close, standardized evaluation (Kanter 1977, p. 53), executives in the Playco matrix especially benefit in this regard. Their responsibilities often place them in formal structures with different standards and goals, a situation that creates differential allegiances in terms of authority and time commitments. Department heads, officially charged with the evaluation of their direct subordinates find it difficult to apply meaningful evaluative criteria.

These ambiguities were evident to some Playco executives when it first implemented its matrix in the mid-1970s following the participation by several of its executives in midcareer management programs at two graduate business schools. A long-time senior vice president remembered, "We had read about the matrix in *Harvard Business Review* and believed it might invigorate our top management; especially related to product development. So, a few of us went to an [organizational development] seminar to learn about it. It sounded complex although it also sounded like we needed it." In fact, many executives initially resisted the matrix because of their perception of the uncertainty its dual authority would create. A vice president of administration recalls, "We had a hell of [a] time convincing our people to give it a try. What with the changes in industry going on, a lot of people thought they might lose their jobs; that the matrix would replace them or something. People wanted to hold on to their old ways of doing things. For the first couple of years, it was chaos. Nobody knew who to report to or who was responsible to whom. Everybody was really uncertain about the future."

One measure of the initial uncertainty faced by Playco executives in the matrix derives from files of the administration department containing "operating procedure" memos issued to executives about their new responsibilities in the matrix. In 1976, the first year of the matrix, 55 general memos were found detailing executive reporting lines and respon-



sibilities. Many of the 58 general memos in 1977 corrected earlier memos regarding reporting authority and task responsibility. In each successive year such memos decreased gradually until memos along these lines ceased in early 1982.

As Playco executives struggled inside the corporation to manage the uncertainty of their jobs, the American economy came to grips with significant changes in corporate acquisition practices. Hostile takeovers occur when "more than 50% of the shares of a large, publicly held corporation are purchased by another over the loud, public protestations of the target company's management, board of directors, and/or minority shareholders" (Hirsch 1986, p. 801). Playco engaged in several "friendly" takeovers (with the full knowledge and consent of shareholders and management of the target firms) and a few unsuccessful mergers; it also warded off two hostile takeovers and two friendly offers between 1975 and 1987. Executives at the firm considered friendly takeovers a legitimate business strategy, especially the way they "play the game." As the Playco chief executive officer put it, "We've worn white hats [as the good guys would in an Old West movie] in the takeover game. We're not [Carl] Ichan or Texas boys [in reference to particularly ruthless takeover entrepreneurs]. The firm has always been up front when going after [a takeover candidate]." Amid Playco's organizational and environmental changes, the ways executives framed their executive conflict management and the issues surrounding it also changed, as the next section demonstrates.

#### EXECUTIVE CONFLICT MANAGEMENT PATTERNS: 1984-87

##### Conflict Issues

Like managers in other organizations with matrix management (Butler 1973; Stinchcombe 1985), much of the conflict among top managers at Playco centers around issues of executive coordination and responsibility, or, in the words of the executives themselves, "who's supposed to do what, how soon, and where." Such conflicts typically involve differences in what executives term "vision" between product team leaders and department heads—the heads manage the demands of many product teams while product team leaders, in the words of a department head, "only worry about their products." In one situation, for example, a senior vice president leading a product team proposed a set of marketing goals that would eventually require significant modification of several of the company's manufacturing facilities. Several operations executives balked at the plan, claiming that the senior vice president had failed to take into consideration, as one vice president put it, "the real constraints of manufacturing and the time it takes to retool large assembly plants."

The allocation of resources within the company, such as budgetary increases or decreases, office space, and personnel reductions or additions also fuel interpersonal tensions at the executive level. Most departments at headquarters, for example, share office space in the crowded, multistory "main tower." To consolidate their departments, many executives attempt to place subordinates with whom they most often work in offices near them. This practice prompts conflict as executives, trying to build similar spatial "empires," find themselves outflanked by their colleagues. Still other executives fume at personnel reductions, especially if they face increasingly difficult group goals but have fewer employees or smaller budgets to meet them.

The simple scheduling of meetings can cause executive conflict as well. Top managers often remarked during interviews about how "insulted" they felt when colleagues cancelled meetings without reasonable notice or simply did not attend scheduled meetings. One executive commented, "We waste more time around here trying to find meeting times. It takes a bozo to miss a meeting without calling."

Conflict sometimes occurs over what top managers term "ethical issues": the acceptance of gifts from suppliers or vendors, the fabrication of travel receipts, or pilfering from the company stores for private use. Conflicts also arise over executive style. One example concerned a president who frequently delivers "barbed quips" to his opponents at executive meetings. According to one top manager, "He has to learn to express his opinions, strongly, even if they are opposed to whatever is on the floor, and not be so sarcastic. He should treat his people [subordinates] more openly. But I guess it's just a defense mechanism. It's hard to be shot at when all there is to shoot is some quip you've thrown out." Some executives are also accused of "risk aversion," such as when a president criticized a senior vice president for his unwillingness to take the lead in a quality control program that might initially generate cost overruns for a new product, but could save the company millions of dollars in the long run.

Executives also regard the mixture of aggressiveness and excessive "emotional involvement" highly inappropriate. An executive nicknamed "the princess of power" illustrates this tendency. An informant explained that the princess of power sometimes violates executive etiquette: "Sometimes in meetings, she hammers at you, and gets real emotional about it; lets things get to a personal level. Most of the time she keeps it together. But you never know when she's going to red line, when things will get out of hand. It's one thing to be direct, to defend yourself in a strong manner, and quite another to be so emotional."

It is interesting as well to note what topics rarely cause executive conflict: gender issues related to fair treatment or hiring practices, legal

consequences of company practices, idea stealing from colleagues for new products, and the quality or social value of new products. When these issues do become the bases for conflict, executives are especially prone to focus on *how* the principals pursue their grievances, rather than the substantive content of the disputes themselves.

### Honor among Executives

Whatever the issues involved, Playco executives place great importance on personal reputation and public esteem in handling conflict with their colleagues—what they call an executive's "honor." At Playco, honor constitutes the core of managerial culture. Playco executives often speak of an executive's honor by reference to his or her "style," characterized as either "weak" or "strong," or whether they wear "white hats" or are "white knights," denoting their hero-like status. Less honorable executives are often referred to as "black hats" or "black knights," denoting a more deviant (in some cases, villainous) status. The origins of executive honor at Playco can be dated to the firm's first corporate acquisition in the mid-1970s. A senior vice president recounted, "Everyone [executives] seemed to be talking about [hostile] takeovers; white knights this and black knights that; how some takeover players played the game dirty [were not "up front" in their takeover bids]. The art of the takeover became big conversation at parties and at the office. . . . We began talking about the "art" [using his hands to make quotations in the air] of the meeting, getting promoted, dealing with each other; especially fighting with each other. Now it consumes us." A top manager depicts the honorable Playco executive: "What is a strong executive, a guy who wears a white hat? A tough son of a bitch, a guy who's not afraid to shoot it out with someone he doesn't agree with; who knows how to play the game; to win and lose with honor and dignity."

And the "game" at Playco, like many codes of honor (Hoebel [1940] 1967, p. 188; Bordieu 1965, p. 211; Rieder 1984, p. 138; Wyatt-Brown 1984, p. 372), demands that challenges to one's decisions or behavior by worthy opponents be aggressively answered in a calculated fashion, and that one's colleagues recognize this concern for riposte. In this way, honor is, as Pitt-Rivers generally notes, the "value of a person in his own eyes, but also in the eyes of his society" (1965, p. 21). To be "honorable," then, means to follow a particular code of conduct and to have claim to the esteem of others and superiority over those who deviate from the code. At Playco honorable individuals and groups often translate their status into decision-making power and greater opportunities for gaining resources and building trust. The informal status conferred by executive honor thus displays less ambiguity than formal titles in the

matrix. Highly honorable executives' statements at executive meetings (regardless of content) receive more respect and outward consideration by their colleagues than those of less honorable executives. Formally low-ranking but highly honorable executives are, as the executives say, "brought into" important decision-making processes by members of the office of the president. The company trusts those of great honor with the most sensitive executive tasks (such as negotiating with foreign governments about building manufacturing or distribution facilities). Honorable executives usually receive requested product team assignments. Executives even ask their highly honorable colleagues to facilitate executive conflict management. A 30-year veteran at the company commented on this aspect of honor among Playco executives: "Unless people [executives] see you have some notches on your gun, you're not going anywhere in this company. You can't back down here. You can't ambush people or shoot 'em in the back. Everyone knows real fast what color hat a manager wears in this organization."

Yet, task performance does not always translate into honor. A product team known as "the wild bunch" typifies this tendency as described by Playco's chief executive officer: "That team has been successful with our home computer lines, but they're a bunch of outlaws. . . . In what way? They don't understand how we do business at [Playco]. There are appropriate ways and inappropriate ways of fighting. The members of [the wild bunch] never learned that."

The subsections that follow analyze how Playco executives handle conflict. First, I examine conflict among honorable executives, then conflict among executives of lesser repute.

### Conflict Management among Honorable Executives

The transformation of what Playco executives called conflict management "behind closed doors" during the 1970s into public contests of honor parallels the transformation of corporate acquisitions through symbolic imagery into a "high-stakes drama and spectator sport with a full panoply of characters cast as heroes and villains" (Hirsch 1986, p. 814). Playco executives generally use the imagery of "valiant efforts" and "failed gambits" to frame what they call "honorable" or "strong" conflict management. The Playco imagery used to describe honorable conflict also draws from the more respectful aspects of chivalry, the Old West, sports, and warfare genres, which are used in popular language to describe hostile takeovers and are also used at Playco in reference to the company's entertainment product lines. Table 1 presents a listing of the

TABLE 1

CONFLICT IMAGERY AND CORPORATE TAKEOVER IMAGERY BY GENRE, PLAYCO  
IMAGERY, AND TAKEOVER DERIVATION

| Genre                   | Playco Imagery         | Takeover Derivation      |
|-------------------------|------------------------|--------------------------|
| Animals .....           | Dogs on a leash        | ...                      |
|                         | Pigeon                 | Pigeon                   |
|                         | Dog                    | Pigeon                   |
| Body/health .....       | Amnesia                | ...                      |
|                         | Dick                   | ...                      |
|                         | Gas attack             | ...                      |
|                         | Strong                 | ...                      |
|                         | Temporary amnesia      | ...                      |
|                         | Weak                   | Pigeon                   |
| Chivalry .....          | Black knight           | Black knight             |
|                         | Duel                   | Shoot-out                |
|                         | Executives in distress | ...                      |
|                         | Honorable              | White knight             |
|                         | Princess of power      | ...                      |
|                         | Second                 | ...                      |
|                         | Sleeping beauties      | Sleeping beauties        |
|                         | Weak                   | Sleeping beauties/pigeon |
|                         | White knight           | White knight             |
|                         | Wizard                 | ...                      |
| Nautical .....          | Jumping ship           | ...                      |
|                         | Life vest              | ...                      |
|                         | Pirate                 | Pirate                   |
|                         | Raiding                | Raiding                  |
| Relational/sexual ..... | Crying                 | ...                      |
|                         | Patched up             | Wooing                   |
|                         | Rape                   | Rape                     |
|                         | Waltz around           | Dancing                  |
|                         | Withdrawal             | ...                      |
|                         | Blindsided             | ...                      |
| Sports .....            | Cheap shots            | ...                      |
|                         | Failed gambit          | ...                      |
|                         | Hunting big game       | Hunting big game         |
|                         | Playing the game       | Ball is in play          |
|                         | Serious players        | Takeover players         |
|                         | Target                 | Takeover target          |
|                         | Valiant effort         | ...                      |
|                         | Meltdown               | ...                      |
|                         | Red line               | ...                      |
| Warfare .....           | Burning fighter        | ...                      |
|                         | Declare war            | ...                      |
|                         | Killing an idea        | ...                      |
|                         | Fight fire with fire   | ...                      |
|                         | Flak vest              | Flak                     |
|                         | Flight deck            | ...                      |

TABLE 1 (*Continued*)

| Genre               | Playco Imagery             | Takeover Derivation  |
|---------------------|----------------------------|----------------------|
|                     | Flying low                 | ...                  |
|                     | Hand grenade               | ...                  |
|                     | Peace talks                | ...                  |
|                     | Roadblock                  | Barricade            |
|                     | Small burst of fire        | ...                  |
|                     | War                        | War                  |
|                     | Wounded list               | Wounded list         |
| Western .....       | Ambush                     | Ambush               |
|                     | Black hats                 | ...                  |
|                     | Bullets                    | Flak                 |
|                     | Bushwhacks                 | Ambush               |
|                     | Cavalry                    | ...                  |
|                     | Call out                   | ...                  |
|                     | Outlaw                     | ...                  |
|                     | Shoot-out                  | Shoot-out            |
|                     | Sit down                   | Wooring              |
|                     | White hat                  | ...                  |
|                     | Wild bunch                 | ...                  |
| Miscellaneous ..... | Art of                     | Playing by the rules |
|                     | Bozo                       | ...                  |
|                     | Hiding                     | ...                  |
|                     | Iron man                   | ...                  |
|                     | Italian lira (money order) | Russian rubles       |
|                     | Sucked in                  | ...                  |
|                     | Skirmish                   | ...                  |
|                     | Terminator                 | ...                  |
|                     | Texas boys                 | Big-hat boys         |

terms used by Playco executives sorted into genre groups and their takeover derivations.<sup>5</sup> (App. B provides a detailed glossary of these terms.)

Behaviorally, Playco top managers pursue conflict with each other within the framework of a moralistic "tit for tat" (Rieder 1984, p. 133) or "reciprocal aggression" (Black 1990, p. 44) characteristic of vengeful conflict management among honorable disputants everywhere. As argued earlier, codes of honor generally specify the rules of challenge and riposte, including when, where, and with whom vengeance should occur. The social identity of an aggrieved party and the respective foe is particularly salient. Only weak subordinates, as several executives noted, back down from defending their decisions even when challenged by their superiors,

<sup>5</sup> Definitions of hostile takeover imagery in table 1 and in App. B derive from Hirsch and Andrews (1983) and Hirsch (1986).

and only weak superiors fail to press their claims against recalcitrant subordinates—at least until compromising with them. To protect or advance one's honor, only worthy opponents can be challenged or responded to in a dispute. This prerequisite assumes that the principals recognize each other as honorable (and are aware of their overall reputations in the company), and that with the exception of intradepartmental conflict (discussed below), top managers wait until a strategic public occasion to issue their challenges or responses. Worthy opponents therefore know and follow the rules of the game, generally play well (even if they lose), and abide and accept the consequences of their outcomes. Those who do not play the game well are to be avoided lest they contaminate the reputation of honorable and higher status executives. Table 2 presents the processual character of honorable conflict management and the quantitative distribution of these forms across three important contexts in which they occur at Playco: within departments, within product teams but between principals of different departments, and between principals of neither the same department nor the same product team.

Although reputations are mutable at Playco, early labeling as a "black hat" tends to follow an executive throughout his or her career at the firm. In this sense, one's initial reputation can act as a self-fulfilling prophecy. Behaviors one would find unusual in honorable executives, such as emotional outbursts or covert action, come to be expected from dishonorable Playco executives. Even behavior identical in both honorable and less honorable disputes, for example, arguing, carries with it different labels reflecting the status of the disputants. Arguments are "skirmishes" among honorable executives and "cat fights" among less honorable top managers. At the same time, honorable executives enjoy a certain leeway in explaining and having their behavior explained should they deviate from the code of honor.

If honor provides the overarching rules of the game for Playco executive disputes, the social distance between honorable disputants determines how those rules are applied in particular cases. Social distance generally increases the aggression between principals (defined here as the degree to which a disputant attempts to achieve a desired outcome at the expense of an adversary), the length of disputes, and their scope in terms of the number of individuals involved (on this general effect, see Koch [1974, pp. 91–158]; Rieder 1984, pp. 146–48). Where the principals are more socially intimate, such as in the situation of departmental colleagues, the reciprocity of their actions is less exact, less controlled, but also less aggressive and more likely to end in a mutually agreeable outcome. Conflicts among departmental colleagues not only weaken departmental solidarity, which may be crucial in interdepartmental feuds, but also threaten the department's collective honor, so important in main-

TABLE 2

## CONFLICT MANAGEMENT AMONG HONORABLE EXECUTIVES

| Work-Unit Membership<br>of Principals              | Initial<br>Exchanges       | Secondary<br>Exchanges | Probable<br>Outcomes   |
|--|----------------------------|------------------------|--|
| Same department<br>(case 1)                        | Skirmish                   | Sit down               | Patch up   |
| Same product team<br>(case 2)                      | Call outs                  | Duel/shoot-out         | Withdrawal<br>Patch up<br>Rescue by a white knight             |
| Neither product team<br>nor department<br>(case 3) | Call outs<br>Hand grenades | War                    | War<br>Rescue by a white knight<br>Peace talks<br>Jumping ship |

NOTE.—For case-1 types,  $n = 7$ ; for case-2 types,  $n = 11$ ; for case-3 types,  $n = 6$ .  $N = 24$ . For definitions of terms, see App. B.

taining its status relative to other departments. For these reasons, departmental colleagues (especially department heads) always attempt to prevent a dispute from escalating beyond the private confines of their department. Because of the ambiguities in command created by the matrix, departmental colleagues' influence remains limited to persuasion. Such persuasion is most effective when departmental colleagues have offices near one another, where they can use their intimacy as a resource with one or the other principal. Social distance also affects the imagery used by principals in framing conflict management. More intimate principals tend to use less imagery in describing their own and their opponent's actions, and what imagery they use is less aggressive than that used for interdepartmental conflict. The narrative below offers a representative illustration of the intradepartmental conflict management pattern in table 2. It begins with an argument between the principals.<sup>6</sup> Rather than escalating into a more aggressive pattern, the principals negotiated a compromise to their conflict.

*Case 1: The gifted vice presidents.*—Representing Playco in dealings with foreign companies is always tricky business. In one instance, two highly regarded operations vice presidents, Spelling and Roberts, received gifts from a supplier during a trip to the supplier's Southeast Asian country. The gifts, intended to strengthen the relationship between

<sup>6</sup> Cases selected for presentation were chosen because of their representativeness of individual-level behaviors and patterns of conflict management among Playco executives. All nicknames and titles specific to Playco executives were changed to protect the anonymity of those involved. Product team responsibilities and some incidents were also altered to protect the anonymity of Playco executives.



Playco and the supplier, included expensive jade jewelry for the VPs' wives and Rolex watches for themselves. Spelling and Roberts knew they would have an argument with their senior vice president, Turner, over accepting the gifts. Yet, as Roberts pointed out, "We took a greater risk not taking them and losing face with [the supplier]." The vice presidents also knew Turner would take a strong stance in handling the matter because he wears one of the "whitest hats" in the firm. An argument did erupt between Spelling and Roberts and Turner when they told him of accepting the gifts. Turner demanded they return them, claiming they had put the company at legal risk. The principals in this case were quite confident that their colleagues recognized the ambiguities of doing business abroad and at the very least the information would not escape the organization in any traceable way to legal authorities. They were more concerned that the department not be viewed, in their words, as weak and torn by indecision. After talking with departmental colleagues about the importance of resolving their dispute, the principals had a "sit down" to "patch things up." Turner agreed to visit the country and meet with Playco's suppliers. Until then, Spelling and Roberts would refrain from accepting any more gifts from suppliers.

Interdepartmental cases exhibit the ritualistic nature of Playco executive conflict management more clearly. Case 2, for example, illustrates what Playco managers refer to as "meeting duels" before which the principals punctuate their challenges and ripostes with more patience and what Rieder (1984, p. 145) observes in general for honorable conflict management as "a quality of calculation . . . the wily sizing up of a rival's mettle" during which the disputants argue until their proposals or ideas are, as the executives say, "killed" and the bearer of the vanquished idea "withdraws." The case recounted below illustrates interdepartmental/product team conflict and also underscores an important principle among Playco executives: The *way* an executive *wins* is as important as the *way* he or she *loses*. Victors rarely claim complete defeat of an opponent. To do so would be to insult the honor of the vanquished and, in the process, do dishonor to themselves. Even executives who do not win, but who play by the rules, maintain a part of their reputations and can more easily restore their honor in a future contest. At the same time the imagery used by executives to frame interdepartmental disputes versus that used in intradepartmental conflicts is more aggressive. Such variation conforms to the aggressive imagery used to describe socially distant actors relative to the business mainstream in highly publicized hostile takeovers (Hirsch 1986) and generally by international disputants to describe socially distant opponents (White 1965).

*Case 2: The target date duel.*—Executives on the same product team often split into smaller groups to decide issues relevant to the team as a

whole. Three executives (the marketing team leader, Harris, and the executive representatives from R&D, West, and sales, Holmes) decided to meet separately from their team to devise a set of target dates for the development of a new set of products. West agreed to arrange meetings with Harris and Holmes and attempted to do so over a three-week period. Each time he scheduled a meeting, either Harris or Holmes cancelled at the last minute. In the meantime, West quietly gathered the data necessary to organize the plan by himself because he knew he "was dealing with a couple of the strongest people on the product team and he had to be ready if they proposed their own plan." He announced at a regular team meeting he would not be caught by surprise by his colleagues and would put together a plan of his own. Facing Harris in the meeting, West announced that he would have nothing to do with a plan proposed by her or Holmes if, as he phrased it, "they had the balls to talk." Harris and Holmes decided that they might be able to "put some notches in their own guns if they shot [West's] proposal down." Harris responded to West's challenge by walking to his office the day after the meeting and, in the middle of a meeting between him and three other managers, told West "that they [Harris and Holmes] were insulted that he had gone ahead without their participation, and would present a plan of their own." These challenges and counterchallenges indicated a "duel" would occur at the next team meeting. Besides carefully preparing their presentations, each of the principals prepared themselves through rituals common in such situations. All of the principals wore their lucky ties and "flack vests" (uncommonly worn on a day-to-day basis) to fend off "bullets" from the opposition. They all spent extra time at their respective health clubs: taking more time in the sauna, and each having a massage. They also spent considerable time talking to their departmental colleagues about how they would comport themselves during the presentation. The rest of the team knew of the "duel" via an agenda circulated three days prior to the meeting. As was customary, an uninvolved team member spun a gold ballpoint pen flat on the meeting table; the principal to whom the ink end pointed being allowed to chose the order of presentation. The pen pointed toward West, who elected to present last. Holmes acted as Harris's "second" by handing out copies of the plan to team members and handling all of the visual aids. West used an R&D middle manager as his second. At the conclusion of each presentation, West and Harris began a give and take of questions, criticisms, and rebuttals, each careful not to interrupt the other. During this part of the duel, Harris's rebuttals and criticisms grew weaker until she sat mute in response to two lengthy questions by West. West, on the other hand, grew stronger; his criticisms and rebuttals to Harris became more authoritative each time he spoke. The other team members remained silent until, as the

operations representative put it, "the jousting concluded." In the aftermath of her two-minute silence to West's final points, Harris tore up her copy of her's and Holmes's plan signaling her acceptance of West's plan. Holmes then collected their copies of the plans from the rest of the team, and instructed a secretary to feed them into a paper shredder. After the meeting, the combatants ritualistically shook hands. During this duel, none of the other team members spoke until after it concluded, at which time, the meeting moved on to other agenda items. Later, West said to the observer that, although the team had not accepted his colleagues' plan, Harris and Holmes answered his challenge "strongly." "After all," he concluded, "they're strong players. They couldn't just sit there and do nothing after I called them out."

In disputes between principals who do not work in the same product team but reside in "strong" departments, matters that might seem trivial to an outsider—the remodeling of one wing of corporate headquarters, whether the company should fly the flags of representatives of foreign governments when they visit a company installation, and the location of assigned parking places for executive secretaries—may escalate into a collective feud between departments and their allies. In all of these cases, the lack of social links between the disputing departments means there is little social pressure to end hostilities and great social pressure to attack in honorable ways. Executives therefore find it nearly impossible to end interdepartmental conflicts without the aid of third parties who intervene to bring about some sort of settlement (white knights who "rescue" executives "in distress"). Here again the matrix weakens the ability of third parties to constrain or resolve hostilities because of ambiguous and overlapping chains of formal authority. As in intradepartmental conflict, such intervention is limited to persuasion.

Third-party supporters, however, may have the opposite effect on interdepartmental disputes, spreading them to many departments and product teams. The solidarity among marketing and operations executives, for example, engenders the expectation of automatic partisanship in interdepartmental conflict involving one of their own. In less cohesive units, such as sales, partisanship is highly tenuous, and defections to the opposition are not uncommon. Case 3 illustrates the modal patterns of conflict management among executives who do not work in the same unit and who work in departments with staunch allies.

*Case 3: The marketing plan feud.*—Executives at Playco earn colorful nicknames, such as the aforementioned "princess of power" in marketing, as well as "iron man" in operations, and "the wizard" in R&D. Early one calendar year, the princess of power became the head of marketing and introduced a new general marketing plan for the company. Playco traditionally concentrates its production in a five-month period.

With several months of marketing surveys showing Playco's home computer products leading the way, the princess of power wanted to extend production to nine months per year to capitalize on expanding markets in Australia, Southeast Asia, and Europe. As head of operations, iron man believed this plan would jeopardize the quality control systems he had personally championed in the company's manufacturing facilities, systems that had become industry standards. The princess of power and iron man had never sat on a product team together, so when they met twice with members of the office of the president to discuss the nine-month plan, they spent most of their time, as iron man observed, "simply trying to understand each other." At some point in these meetings, iron man became annoyed with what he called the princess of power's "small bursts of fire" about operations' lack of support for the marketing plan. He felt that she treated him like a "horse put out to pasture who didn't know a demand function from a hole in the ground," while "she did not understand, nor want to understand what the hard constraints on manufacturing related to quality were." The princess of power believed iron man was "inflexible" and "out of touch with the direction the company had to go." At two subsequent meetings the principals exchanged very direct complaints along the lines described above. By the fourth meeting, the princess had grown tired of iron man's "roadblocks" and, in her words, "carefully questioned whether [iron man's] questions were in the company's own interests or his own." Iron man waited several minutes until the princess had finished her complaints about his reactions to the plan. He then stood up and, in his words, "threw her a couple of hand grenades by looking her in the eye and saying that [he] would not allow her to kill every idea he brought up in public." The princess then stood up and said, "If you want a war, fine." The ensuing months witnessed the outbreak of war between operations and marketing and their supporters: several presentation shoot-outs and duels between marketing and operations executives and managers as well as the mobilization of members of other departments on behalf of the principal departments. During the dispute, the vice president of administration, Johnson, known as a white knight who rescued executives in distress, intervened with two other white knights—the president of international affairs, Sims, and the wizard—to reduce the "wounded list." These attempts proved initially unsuccessful, but eventually resulted in a two day off-site set of "peace talks" which nearly 30 executives and managers attended. The meetings produced a truce between the factions and a private dinner between iron man and the princess at which, according to Johnson, "they agreed they disagreed on a variety of matters."

While these analyses and illustrative cases portray the modal realities of conflict management among Playco executives, there is, as the Playco

TABLE 3  
CONFLICT MANAGEMENT AMONG LESS HONORABLE EXECUTIVES

| Work-Unit Membership<br>of Principals              | Initial<br>Exchanges    | Secondary<br>Exchanges                                   | Probable<br>Outcomes                 |
|--|-------------------------|--|--------------------------------------|
| Same department<br>(case 4)                        | Flying low<br>Cat fight | Flying low<br>Hiding<br>Red lining                       | Amnesia<br>Jumping ship<br>Vaporized |
| Same product team<br>(case 5)                      | Waltzing around         | Temporary amnesia<br>Gas<br>Crying<br>Hiding<br>Meltdown | Amnesia<br>Jumping ship              |
| Neither product team<br>nor department<br>(case 6) | Call out                | Temporary amnesia<br>Crying<br>Bushwack/ambush/raid      | Amnesia<br>Jumping ship              |

NOTE.—For case-4 types,  $n = 5$ ; for case-5 types,  $n = 6$ ; for case-6 types,  $n = 4$ .  $N = 15$ . For definitions of terms, see App. B.

managers say, a “seamier side” to political life at the top of the corporation that involves only those executives labeled as weak.

### Conflict Management among Less Honorable Executives

Less honorable executives most clearly indicate their lower status by not responding at all or responding in inappropriate ways to grievances by colleagues. They allow colleagues to verbally “rape” them, simply tolerate their opponents by “flying low,” participate in covert action to inconvenience opposition departments through “raids,” or avoid inflamed conflicts by “parachuting out of burning fighters” (when they should see them to their end and “ride them down”). Table 3 contains the patterns of conflict that are labeled “less honorable” by Playco executives.

The imagery of conflict used by executives to describe the conflict management among less honorable executives also highlights that group’s violations of the code of honor at Playco. Whereas honorable colleagues portray their opponents in worthy lights by referring to them as white hats or serious players, less honorable executives talk about their adversaries as “dicks” or “sleeping beauties.” Moreover, honorable executives commonly label their less honorable departmental colleagues as “pigeons” or “bozos” and their arguments as “cat fights” rather than the more value-neutral “skirmish.”

The intradepartmental patterns of executives labeled as less honorable are illustrated in case 4 below. It should be noted that Playco executives

do not deplore fighting between executives. Rather, they deplore it when it is outside the boundaries of the code of honor. During fieldwork for example, two boxing matches were arranged between executives at a local gym in order that they might, as one executive observed, "work out their differences." Case 4 involves executives whose long-standing, unexpressed grievances unpredictably escalated from a public argument to scuffling, and eventually to the resignation of one principal.

*Case 4: Red lining in the parking lot.*—A vice president of sales liked to think of himself as, and liked others to call him, "the terminator" because, as he put it, "[he] hunts big game anyway he can [looks for honorable opponents whom he can best in conflict]." According to several Playco executives, the terminator's track record was not as good as he liked to think, and he frequently allowed the strongest executives to rape him in meetings. When he did retaliate, he did so by attacking pigeons. The terminator and his senior vice president, Greer, each believed the other to be dicks but flew low in not expressing their grievances. One morning, while employees streamed into Playco's main parking lot, the terminator was unloading briefcases from the trunk of his car when Greer eased past in his car and asked to see the terminator in his office later that day. After Greer parked his car, the terminator walked over to his car and said, "Hey, I'm not your dog. What the hell do you want to see me for now?" As the two men argued, other issues surfaced, including the terminator's open "womanizing" with company secretaries and with married women at a local health club to which many Playco executives belonged. The cat fight quickly "red lined" whereupon Greer shoved the terminator against the trunk of his Lotus sports car. The terminator then grabbed Greer and pushed him to the pavement. A crowd of employees gathered to watch the melee, and as company security officers arrived on the scene, Greer threatened to "vaporize" the terminator. Although outward pressure from Greer was not evident, the terminator "jumped ship" several weeks later.

Social distance has the same general effects on conflict management among less honorable top managers as it does on their honorable colleagues. Intradepartmental conflict among less honorable executives is less aggressive, is shorter, and has a narrower scope than that which occurs interdepartmentally. The imagery used by less honorable disputants to describe socially distant opponents is also more aggressive (in the sense that the principals attempt to garner zero-sum wins with their opponents). Case 5 illustrates interdepartmental conflict between less honorable executives. Note that this case begins in a similar fashion as one might between two honorable executives. However, it quickly evolves into several nonverbal grievance exchanges, including "temporary amnesia" by one principal of the other's complaints, "crying" about

the conflict by both principals to confidants, "hiding" by one principal to avoid the other, and finally a "meltdown."

*Case 5: The wild bunch.*—The wild bunch is a product team responsible for computer learning aids for children. In one situation, planning vice president Pound believed operations vice president Ingle to be unsuitable to present their team's new products at what Playco managers termed a product send-off (presentations attended by hundreds of Playco employees to preview new products before they go into production). At two weekly team meetings, Pound and Ingle "waltzed around" about the latter's suitability to present. At a third meeting the following week, Ingle turned away from his colleague and noticeably frowned as though he had a "gas attack" to a team member sitting on his other side. He then interrupted Pound in midsentence with a loud, lengthy comment. Subsequently, both Pound and Ingle went crying to friends, but never confronted each other. Pound hid from team meetings for two weeks because, as he put it, "he couldn't stand to be in the same room as that dick [Ingle]." Rumors began in the company that Pound feared confronting Ingle. Two weeks after the initial incident, at another team meeting, Ingle interrupted Pound loudly again and Pound responded by raking his hand across the burgundy teak meeting table, pushing his and two other colleagues' materials to the carpet. Pound and Ingle then had a meltdown by pushing each other and swinging their fists. The meltdown lasted several minutes, spilling out into the hallway where a security guard watched for two or three minutes before breaking it up. Inside the meeting room, two colleagues continued talking about another issue, and two others were laughing. The principals suffered several bruises and clothing tears. Word of the fight quickly spread through the company. Pound commented in the aftermath that he "couldn't let that dick [Ingle] get away with pretending not to listen to me again."

Whereas honorable disputants can mobilize departmental and cross-departmental allies to attack enemies through meeting duels, less honorable executives command neither the loyalty nor the trust to do the same. The scope of less honorable executive conflict management enlarges in unpredictable ways as executives become allies ("sucked in") because, for example, they happen to work in the physical proximity of a feud. Respectable third parties do not generally intervene to settle such disputes either, because of the same trepidation one would have, an executive noted, in intervening into a fight between rabid dogs: "You never know what's going to happen, even if it's your own dog. You could get bit yourself." The narrative below illustrates this process. Note that it begins with a "call out" (as in interdepartmental conflicts between honorable executives). Yet its path deviates from the honorable way when the principals engage in numerous covert actions ("raids," "ambushes," and

"bushwhacks") against each other and allow their grievances to peter out as they tire of the conflict without a public and ritualistic resolution.

*Case 6: The finance raid.*—Two of the executives known for their covert conflict management (who wear the black hats in the firm), Bell, the chief financial officer and, Tweedle, the president of domestic affairs, became embittered over Tweedle's attempt to transfer Hicks, a finance vice president, to engineering to create a new position: vice president of engineering cost control. Financial executives do not meet regularly with product teams but are ultimately responsible for all cost control. Tweedle viewed the transfer as an experimental attempt to integrate finance with the product teams. Hicks would remain a member of finance, have an office in engineering, and meet, when appropriate, with one or two product teams. Bell believed Tweedle had ulterior motives: "This is a chicken shit ambush on my decision power in corporate financial affairs. [Tweedle] tried to do this last year by taking more formal control for the domestic budget. Now this. [Hicks] would end up reporting to [Tweedle]." Bell called out Tweedle at a meeting of the office of the presidents to "lay out his whole strategy for integrating finance into the product teams." Tweedle did not respond at the meeting or subsequently, suffering temporary amnesia by denying to close colleagues that there was any problem between him and Bell. Hicks's reassignment occurred as Tweedle planned. In the ensuing months, Tweedle ignored Bell's many memos questioning the transfer and spread rumors that he and Bell had worked out an agreement for Hicks's transfer and that Bell's word was worth as much as an "Italian lira money order" and perhaps he "did not have all his dogs on one leash." The dispute escalated during remodeling at headquarters when Tweedle approved plans for temporarily moving finance executives to a building adjacent to the executive "flight deck." Without notifying finance, the move occurred on a weekend. When finance executives arrived the following Monday, they discovered the move and that several important computer tapes and data printouts from an internal audit they had just completed had been thrown away. Tweedle knew that Bell had personally championed the now-disrupted audit. Speculation ran high in the company that Tweedle had involved himself directly in throwing away the data when he had stopped by headquarters for two hours during the move. Tweedle expressed his temporary amnesia by maintaining that he had nothing against finance, although he admitted to some that the move would upset the "sleeping beauties in finance" who were believed to be enamored with their own abilities but ignorant of their negative reputation among other top managers. Bell stopped his memo writing for two weeks following this incident as his staff attempted to reconstruct the data from older, backup tapes. In the meantime, Bell suspended all financial data reports to teams developing



domestic products. Bushwhacks such as these continued for nearly two years until Tweedle and Bell tired of the battle. Tweedle and Bell eventually jumped ship. Hicks now occupies the chief financial officer's position.

## DISCUSSION AND IMPLICATIONS

One could argue that Playco's growth into a multinational corporation during the 1970s, and its high product replacement rate (which decreased in the 1980s), could also have led to the observed conflict patterns. One could also argue that the imagery Playco executives use to frame their conflicts derive solely from their products lines: games and learning aids that encompass the themes of chivalrous duels, Old West shoot-outs, and science fiction warfare. Indeed, only 30 of 72 Playco conflict images derive directly from hostile takeover imagery (see table 1). Yet, the very same themes in these product lines—the “bread and butter” of the firm, as one executive put it, for over 30 years—existed prior to the firm's restructuring with the matrix and the advent of the hostile takeover. Despite all of these factors, the culture of honor among Playco executives did not exist until the 1980s. Conflict management prior to the 1980s resembled the placid scenes offered by Kanter (1977) and Moore (1962). Thus, many of the local symbols that Playco executives draw on to linguistically frame their conflict into contests of honor existed, but they did not have a plausibility structure associated with them until the transformations brought about by the matrix. By the same token, the imagery of the hostile takeover would not have had the impact on executives if it did not coexist with the particular plausibility structure at Playco. If the language of the hostile takeover represents the institutionalization of a *symbolic* dimension of a macro social change in *intercorporate* American business (Hirsch 1986, p. 821), the experience of executives at Playco illustrates the impact of symbolic *and* structural dimensions of matrix structures and hostile takeovers *inside* corporations. It is first to the plausibility structure of Playco honor that I now turn, and I follow with an examination of the consequences of Playco honor at the organizational and individual levels. I conclude with speculative implications of intra-corporate executive honor and vengeance for the study of executive inertia, control, accountability, and theoretical approaches to firms.

### The Plausibility Structure of Honorable Vengeance

Black, drawing from cross-cultural studies of conflict management, argues that highly predictable and ritualized conflict management framed by codes of honor is common among relatively equal disputants who have

sustained mutual access to each other and who have standing groups of supporters they can easily mobilize on their behalf, but who are not socially intimate or functionally interdependent (Black 1990, pp. 44–47). Taken together, these variables operate as a “value-added model” (Smelser 1962, p. 14) that constrains disputants’ choices of conflict management. The more a setting contains these social characteristics, the more likely it will contain a predominance of reciprocal conflict management—vengeance—ordered by codes of honor (Black 1990, p. 62).

Equality (in terms of resources and authority) means that disputants are constantly struggling for some sort of symbolic capital vis-à-vis their opponents. This induces the swift address of affronts by a challenger lest one gain an inferior reputation (Peristiany 1965). Egalitarian settings also contain few third parties who command the resources or deference necessary to settle disputes. Those third parties that do exist in such contexts typically rely upon their personal influence over the parties to suspend their hostilities. Conflicts are therefore rarely transformed from dyadic confrontations between principals to triadic settlement processes (Koch 1974). Where standing groups exist, the risks of confrontation can be syndicated across group members. As a result, groups, rather than individuals, may be even more willing to openly reciprocate grievances against opponents (Thoden van Velzen and Watering 1960). Finally, relational distance and functional independence reduce the likelihood of common interests (especially exchange relations), which both disputants may want to protect and which can engender more restrained conflict management (Colson 1953; Gluckman [1956] 1967).

Playco executives experience all of these conditions to some degree as they navigate their matrix and departmental authority systems. As described earlier, Playco top managers find themselves in a relatively egalitarian system: the crosscutting authority in the matrix and departmental hierarchies tend to cancel each other out. The uppermost levels of the corporation, the office of the president, contains four top managers of relatively equal formal status and with complex and ambiguous reporting lines to their subordinates. Thus, even at the top of the corporation, the possibility of third-party settlement is highly constrained. Executives also have easy access to each other by being housed in the same building and by attending frequent meetings with each other. Yet, most executives still tend to confine their informal interaction to departmental colleagues, reserving much of their interdepartmental interaction to formal meetings. When executives speak of the necessity of informational interdependence among colleagues, they primarily refer to that among their intradepartmental colleagues. Many executives, therefore, can call upon departmental colleagues as allies in disputes and other affairs. The fact that more ritualized challenges and ripostes occur in interdepartmen-

tal conflict conforms to general propositions that relational distance, functional independence, and a high capacity for collective action are found whenever disputants engage in honorable vengeance. Also found in settings where honor is the symbolic currency of conflict is behavioral predictability at the individual and social organizational levels.

### Small Wins and Individual Uncertainty

In a world where the corporation could be "taken over at any minute," as one Playco top manager put it, in which corporations are increasingly restructuring their operations, executives realize their substantive decisions can become instantly meaningless because of the actions of unknown investors or shareholders. One of Playco's presidents commented that "to worry about a single decision and how it's going to affect the firm is foolish. We can't really control what the market does, what the shareholders do, or what some yahoo investor with big money wants to do [in the case of a hostile takeover]. So you might as well try to affect the things closest to you."

In social psychological terms such behavior tacitly adopts the strategy of "small wins . . . controllable opportunities that produce visible results" (Weick 1984, p. 43). Actual restructuring and its threat in companies that have experienced takeovers has eroded organizational loyalty to the point where small win strategies often manifest themselves as "managerial free agency" (Hirsch 1987, pp. 107-18): a lack of focus on corporate goals and the continual consideration of viable employment with organizations other than one's own. Playco executives breathe the air of takeovers, have witnessed their effects on companies that have been so acquired, but have successfully fended off takeover attempts themselves. Although Playco executives have not experienced high turnover rates, as indicated by the majority of their lengthy tenures with the firm, they have adapted to this increasing nihilism toward corporate loyalty by focusing on their own fates as expressed ritualistically through small-win strategies in their culture of honor.

### Social Similarity and Organizational Uncertainty

Honor not only allows individuals to maintain a sense of balance and efficacy within the volatility of American business, it also operates as an organizational culture control in terms of social similarity. Social similarity subtly functions to reduce the uncertainty inherent in the discretionary nature of executive jobs (Kanter 1977). Executives tend to hire people who are socially similar to themselves in terms of ethnicity, education, class background, and gender to fill top managerial posts in order to

assure some predictability and trust in their behavior (Kanter 1977, p. 53).

The functions of social similarity persist among Playco executives through executive honor. Playco's code of honor defines a particular "masculine" standard to which viable members of its relevant community must adhere. Like codes of honor everywhere, it is the key link between self and community, defining appropriate institutional roles (Berger, Berger, and Kellner 1973, p. 86). Honor at Playco defines who is to be trusted; it helps executives predict what their colleagues will do in a setting that might otherwise seem like a maelstrom of ambiguous authority and continual confrontation. The unnerving experience of conflict is framed as a contest of honor with the roles of the principals and their supporters carefully defined. Honor therefore provides an evaluative criterion for executives that operates outside of the official criteria but one that executives can more easily use in dealing with colleagues. In this way, the fetishism of honor among Playco executives orders their goal-directed behavior.

This is why less honorable executives are avoided by their honorable colleagues. Playco executives fear the unpredictability of their less honorable colleagues far more than the familiar challenges of their honorable colleagues. In one way, less honorable executives possess a more valuable form of capital than their honorable colleagues: unpredictability. Yet, in imperfectly imitating the routine conflict management of their honorable colleagues, less honorable executives ironically become impotent in transforming this capital into power by framing their behavior in relatively predictable patterns.

### Implications of Intracorporate Honor

The foregoing analysis suggests several hypotheses to explain top managerial behavior in economic organizations. The first three of these are directly grounded in the Playco case, while the last two are more speculative in nature.

1. *Reputation and honor ceremonies provide stability and predictability in an intraorganizational context of high uncertainty and ambiguity.* This hypothesis summarizes the functions of reputation and honor ceremonies among Playco executives discussed above. However, this hypothesis is not offered without a consideration of how power and control enters into the use of ritualized conflict by executives. Hypotheses 2 and 3 directly consider these implications.

2. *Intracorporate reputation and honor ceremonies can be sources of control and information for top managers over their executive subordinates.* This implication is suggested by Eccles's (1985) arguments that

managerial conflict among subordinates can be used by superiors as a source of information, thus increasing their ability to control, subtly, subordinate behavior. Control can also result from managerial conflict as managers police each others' actions, ensuring, as Eccles (1985, p. 215) argues, that "both are using resources as efficiently and effectively as possible." The public nature of the art of honorable vengeance makes it a perfect source of information for top management at Playco. The chief executive officer, for example, noted that he need not practice Peters and Watterman's (1982) "management by walking around" because information abounded in considering winners and losers in recent managerial duels. The fact that Playco executives gauge reputations in order to appropriately challenge their colleagues and respond to challenges also ensures a great deal of mutual monitoring.

The empirical materials presented in this paper, however, also suggest that the control/information approach can cut several ways. Benefits from conflict and intracorporate vengeance in particular depend on three crucial issues. First, such benefits will result only if executives are driven not only by conflict games but also by substantive issues of importance to the health of their organization. At Playco, ritualized conflict games mean a great deal to executives aside from the substantive issues at stake. Consider, for example, the importance stressed by the participants in cases 1-3 on how they fought their conflicts, how they would be perceived by their colleagues, and whether they won, rather than on what they fought about. In cases 4-6, winning was the only thing, to quote Vince Lombardi's old cliché; the standards of the game, much less its content, were not paramount to its participants. As a result, it is unclear what kinds of standards the participants will uphold among each other in executive settings conducive to intracorporate honor and vengeance—standards related to the game itself or those related to bottom-line efficiency however measured.

Second, the amount of public conflict (as suggested in remarks by Playco executives comparing mid-1980s conflict management at the firm with that which occurred in the mid-1970s) may lead to further uncertainty and even a sense of powerlessness by top management. The complexities of crosscutting authority relations at the executive levels may constrain translating knowledge of executive activities into timely action. Moreover, members of the office of the president are sometimes constrained to act on the information they garner lest they become involved in a protracted and potentially damaging (to their honor) conflict.

Finally, the informational and control benefits of intracorporate, honorable vengeance depends upon whose perspective one takes in assigning its costs and returns. The office of the president at Playco may benefit from the public nature of conflict in the culture of honor. At the same

time, the benefits to the participants of vengeance is harder to assess. Certainly, one may gain skills at managing conflict in an "honorable" way. If the diffusion of matrix forms and hostile takeovers have created similar conditions in other large firms, then these skills may have some transferability. This is an open question beyond the scope of this article. However, the ethnography suggests that some executives thrive in the world of challenges and ripostes at Playco, while others find it difficult to perform their duties because, as one vice president put it, they "were always looking over their shoulder."

3. *Intracorporate reputation and honor ceremonies act as a check on the obfuscation of accountability in executive decision making created by the matrix and the language and practices associated with hostile takeovers.* This implication relates to 2 above but with specific ties to executive accountability in decision making. Matrix systems promote the syndication of risk by entire executive corps as groups of high-level managers embedded in complex authority relations are responsible for decision making rather than individual managers. In such a structure, it is difficult to trace decisions to any one manager; most decisions must be traced to some group process within or between product teams or departments. Hostile takeovers similarly obfuscate managerial accountability by creating ambiguous lines of corporate control from executives to their own corporation. The turbulent sea of hostile takeovers provides executives with convenient fall guys for poor decision making—stockholders, boards of directors, unknown corporate raiders—all of whom, in a broad sense, syndicate the risk of decision making for corporate executives. Honorable vengeance provides one check on this because of its public nature. The necessity of maintaining one's honor within the corporation requires executives to tout their own prowess at vanquishing opponents, thus making themselves more visible as principals in decisional outcomes.

4. *Over time, the negative reciprocity engendered in matrix systems tends to increase internal organizational inertia.* Scholars and practitioners have long argued that matrix management is extremely difficult to implement (Davis and Lawrence 1977). Less often discussed is the process of changing a matrix system to another kind of managerial structure (such as back to a unitary command structure). Black (1990, p. 47) calls the social setting in which vengeance persists a "stable agglomeration" because its participants are often "frozen" together in endless patterns of negative reciprocity framed by honor. Such a scenario captures the behavioral patterns at Playco. Playco's executive officer noted in a 1989 interview that the managerial system designed to promote flexibility and change, the matrix, may itself be nearly impossible to change once it has been in place over a period of years. In that interview, he expressed some dismay with 12 years of the matrix because it seemed to make

executive relations "more drawn out." When asked if the firm would ever consider restructuring the executive ranks into a traditional hierarchy, he stated that he "wondered if it wouldn't take a merger or a takeover to get rid of the matrix."

5. *Theories of economic organizations that assume pure substantive rationality by top managers will poorly predict firm behavior.* This last hypothesis is the most speculative and extends the furthest beyond the scope of the data in the present investigation. As many sociologists of organizations have argued, to understand large corporations one must consider how multiple sets of managerial interests and structural factors interact to produce organizational outcomes (Fligstein 1987). Most economic models assume that top managers act according to explicit substantive goals regarding their corporation's operations and future; in effect, the structural contexts in which managers act are undertheorized, and a simple maximization model is assumed to operate in executive decision making (e.g., Williamson 1975).

To be sure, Playco executives do think about substantive organizational productivity, but these concerns are mixed with their framing of their intracorporate conflict as the accumulation of honor through participation in vengeance games. All of this suggests that explanatory frameworks that are based solely on assumptions about top managerial substantive rationality and that exclude systematic attention to the procedural rationality and the symbolic framing of executive interpersonal relations will poorly predict the behavior of the firm.

This study has examined the conflict management at the top of a large corporation. The implications offered above, as well as the observations from which they derive, suggest that cultural and structural approaches to organizational research are neither mutually exclusive nor antithetical. It is not simply a matter of whether structure *or* culture takes precedence in explaining conflict management and organizational change, but how they intertwine to affect social settings and the people that constitute them. The challenge, then, for scholars is to construct theory that simultaneously recognizes the realities and rationalities of formal and informal structures while not ignoring the impact of symbols in conflict management and organizational life.

## APPENDIX A

### Methods

#### *Historical Data*

Historical information on executive conflict management prior to Playco's restructuring, the restructuring itself, and its executives' reac-

tion to the hostile takeover movement derive from three sources: (1) a systematic review of the popular business press (the *Wall Street Journal*, *Fortune*, and *Business Week*) for reports of Playco's activities from 1965 to 1987; (2) a review of Playco internal publications and memoranda from 1965 to 1987; and (3) interviews with Playco personnel (described below) about Playco's history. Data on conflict management prior to the institution of matrix management and the threat of hostile takeovers displayed the most uniform consensus across the three sources used. The overall consensus that developed regarding all of the historical data enhances the confidence in its validity and reliability.

### *Fieldwork*

I secured access to Playco through a personal tie to a highly respected consultant who had previously worked with the firm. Three months of negotiation followed this initial contact, during which I established an independent identity from the consultant. Fieldwork commenced at Playco's world headquarters in summer 1984 and lasted through fall 1985. Data collection derived from: (1) informal, conversational interviewing (Dalton 1959, p. 280) with every Playco executive ( $n = 43$ ) and many of their support personnel ( $n = 12$ ); (2) formal, semistructured interviews of executives ( $n = 27$ ); (3) direct observation of formal meetings and casual interaction on a regular basis with Playco personnel throughout the 15-month fieldwork period; and (4) the collection of company documents. Interviews averaged 90 minutes in length and observations averaged five hours in length.

During fieldwork, I was seen as a young, bright, naive observer who needed to be educated, as the executives put it, in the ways of the business world. I also found executives extremely lonely in that they had few confidants (except psychiatrists and other counselors they paid) whom they trusted with the delicate insider information of the corporation. Thus I provided a safe haven to talk about the most intimate matters which could be politically disastrous for informants and damaging to the corporation as a whole. Recent details about the firm have been learned from informants who work in various capacities in Playco.

These methods were specifically used to gather information on the contemporary setting of the organization and in the service of a "trouble case" strategy that consists of "search[es] for instances of hitch, dispute, grievance, trouble [between people] and inquiry into what the trouble was and what was done about it" (Llewellyn and Hoebel [1941] 1983, p. 21; see also Nader and Todd 1978, pp. 5-8; cf. Cain and Kulcsar 1982). This strategy yielded information on 39 trouble cases at Playco.



All trouble cases surfaced in interviews with participants, third parties, uninvolved witnesses, or through direct observation.

Tape recording initially produced self-consciousness in informants. Ethnographic data was thus recorded by jotted notes during conversational interviewing and informal observations, and by extensive note taking during semistructured interviews. These notes became the basis of narratives written on a personal computer as soon as possible after exiting the field.

### *Data Analysis*

Narratives were initially coded for data on (1) formal and informal organizational structure, firm history, organizational rituals, and personnel biographies and (2) conflict including, principals, third parties, grievance issues, behavior used to handle conflict, timing, and related incidents and cases. The boundaries and language of trouble cases (i.e., their separation from other cases and processes) were supplied by the participants themselves. Categories for conflict management behaviors were also drawn from the anthropology and sociology of conflict, especially the works of Nader and Todd (1978), Black and Baumgartner (1983), Rieder (1984), and Black (1990).

Students of conflict management have used fieldwork and data analysis of this kind to learn of conflict in other cultures (Koch 1974, pp. 13–25; Nader and Todd 1978, pp. 5–8) and in American neighborhoods (Merry 1979; Buckle and Thomas-Buckle 1982; Greenhouse 1986; Baumgartner 1984, 1988). Even so, some investigators note such methods can produce samples containing disproportionately dramatic disputes, thus biasing the data toward more observable processes (Koch 1974, pp. 23–24; Baumgartner 1984, p. 82). This tendency was addressed by triangulating data from written documents and multiple informants. Two “deep” informants (veteran executives) provided detailed member checks and cross-checked the reliability of emic coding categories.

## APPENDIX B

TABLE B1

### GLOSSARY OF PLAYCO CONFLICT IMAGERY AND HOSTILE TAKEOVER EQUIVALENTS

| Image           | Definition   |
|-----------------|--|
| Amnesia         | Feigned ignorance of a colleague's grievances  |
| Ambush          | Covert action to inconvenience an adversary (synonyms: "bushwhack," and "cheap shot"; "ambush" refers to a swift and premeditated takeover attempt in takeover imagery)  |
| Art of          | Description of the aesthetics of executive comportment   |
| Black hat       | An executive who often engages in covert action to manage conflict with opponents; from the practice of dressing villains in black hats in early Old West and pirate movies (synonym: "pirate"; cf. "black knight")  |
| Black knight    | An executive who often engages in covert action against opponents, does not support his intradepartmental colleagues in disputes (cf. "black hat"; "black knight" refers to an unfriendly acquirer from the perspective of an acquired firm in takeover imagery) |
| Blindsiding     | An intentional and surprising public embarrassment by one executive at another's expense   |
| Bozo            | An executive who ineptly attempts to follow the code of honor to press his grievances against opponents (cf. "dick")   |
| Bullets         | Criticisms of an executive's plan by an opponent delivered in the midst of a meeting "duel" or "shoot-out"   |
| Burning fighter | A particularly aggressive executive dispute  |
| Bushwhack       | Covert action to inconvenience an adversary (synonyms: "ambush" and "cheap shot")  |
| Cavalry         | Departmental executives who come to a colleague's aid in an interdepartmental dispute  |
| Call out        | Public challenge to a colleague for a "shoot-out" or "duel"  |
| Cheap shot      | Covert action to inconvenience an adversary (synonyms: "ambush" and "bushwhack")   |
| Crying          | Secretly complaining to a colleague about another's behavior without the offender knowing  |
| Declaring war   | Collectivization to aggressively and overtly pursue grievances against a collective opponent (also expressed as "to go to war")  |
| Dick            | A belligerent executive who ineptly attempts to follow the code of honor to press his grievances against opponents (literal reference to the penis; cf. "bozo")  |
| Dogs on a leash | Mental health (not having one's "dogs on a leash" indicates mental instability)  |
| Duel            | Ritualized contest of elaborate formal presentations used to settle an interdepartmental executive dispute (synonym: "shoot-out")  |

TABLE B1 (*Continued*)

| Image                    | Definition  |
|--------------------------|---|
| Executive in distress    | Executive who ineptly follows the code of honor, but who colleagues feel can be saved; also an honorable executive caught in a "burning fighter" (see also, "white knight"; similar to the notion in takeover imagery of "white knights" rescuing corporations in distress from unfriendly acquiring firms) |
| Failed gambit            | Losing an executive "duel" or "shoot-out"   |
| Flak vest                | Suit vest worn by honorable executives during a "shoot-out" or "duel" to ward off "bullets" from the opposition ("flak" refers to impediments to a takeover raised by a target in takeover imagery)   |
| Flight deck              | The executive suites in the multistory "main tower" at headquarters from which most "big ideas" are launched  |
| Flying low               | Not confronting an offender with long-standing grievances against his or her behavior   |
| Gas attack               | Nonverbal expression of scorn for an offending colleague  |
| Hand grenades            | Particularly aggressive insults expressed face-to-face by disputants  |
| Hiding                   | Avoiding an opponent  |
| Hunting big game         | Looking for honorable executives with whom to dispute in order to establish a reputation ("hunting big game" refers to looking for large corporate takeover candidates in takeover imagery)   |
| Iron man                 | The senior vice president of operations known for his "stiffness" in interpersonal affairs, his background in the steel industry, and his reputation as one of the most honorable executives at Playco  |
| Italian lira money order | Reference to the worthlessness of an executive's promise (related to the takeover imagery of "Russian rubles" used to describe early, noncash takeover offers)  |
| Jumping ship             | Resigning from the corporation  |
| Killing an idea          | A principal's idea or proposal in a meeting duel is refuted by another principal and then wholly rejected as viable by a wider audience (cf. "withdrawal")  |
| Life vest                | Suit vest worn by less honorable executives when engaged in a "shoot-out" or "duel" to keep their heads above water   |
| Meltdown                 | Physical fight between executives   |
| Outlaw                   | An executive who handles conflict in unpredictable ways but who is regarded as especially task competent  |
| Patched up               | An agreement to cease hostilities between disputants  |
| Peace talks              | Collective negotiations to cease interdepartmental hostilities  |
| Pigeon                   | An executive who avoids all conflict and has a reputation as particularly "weak" (a "pigeon" refers to a highly vulnerable takeover target in takeover imagery)   |

TABLE B1 (Continued)

| Image                | Definition  |
|----------------------|---|
| Pirate               | An executive who often engages in covert action to manage conflict with opponents but who is regarded as especially task competent (synonym: "outlaw"; cf. "black knight" and "black hat")                  |
| Playing the game     | Engaging in honorable vengeance   |
| Princess of power    | The senior vice president of marketing known to have the ear of the chairman of the board, thought to sometimes "succumb" to emotional outbursts, and believed to be the next president of domestic affairs |
| Raid                 | Covert action taken to inconvenience an opposition department (cf. "ambush," "bushwhack," and "cheap shot"; a "raid" refers to a hostile takeover in takeover imagery)                                      |
| Rape                 | When an executive allows himself or herself to be publicly criticized by another colleague without "calling out" the challenger   |
| Red line             | An argument that unpredictably escalates to physical violence (derived jointly from the danger area on gauges for a nuclear reactor and the tachometer on a car)  |
| Road blocks          | Impediments raised by an executive to block another's decisions (similar to the hostile takeover imagery of "barricade" meaning impediments to a takeover attempt)  |
| Second               | An aide to a principal in a meeting "duel"  |
| Serious player       | An executive who adeptly engages in honorable conflict management (same as a "strong executive" or a "white hat")   |
| Shoot-out            | Ritualized contest of elaborate formal presentations used to settle an interdepartmental executive dispute (same as "duel")   |
| Sit down             | Negotiations between two principals to suspend a dispute  |
| Skirmish             | Intradepartmental argument between colleagues   |
| Sleeping beauties    | Executives enamored with their own abilities but ignorant of their negative perception by other top managers ("sleeping beauties" refer to vulnerable takeover targets in takeover imagery)                 |
| Small bursts of fire | Short public criticisms of a colleague delivered in rapid succession  |
| Strong               | An executive who adheres to the code of honor in handling trouble with colleagues   |
| Sucked in            | To become an ally in an interdepartmental feud through no purposive action of one's own   |
| Target               | An opponent in a conflict; typically used by less honorable executives to refer to adversaries  |
| Temporary amnesia    | Temporary feigned ignorance of a colleague's grievances   |
| Terminator           | Sales executive who adopted the nickname from Arnold Schwarzenegger's movie of the same name because he closes big deals for Playco and "hunts big game any way he can"                                     |
| Texas boys           | Texas takeover men (refers to "big-hat boys" who are Texas moneymen interested in hostile takeovers in takeover imagery)  |

TABLE B1 (*Continued*)

| Image        | Definition   |
|--------------|--|
| Waltz around | Polite argument between less honorable executives (related to "dancing," which refers to preliminary negotiations during a takeover in takeover imagery)   |
| War          | Aggressive and overt collective pursuit of grievances against a collective opponent ("war" refers to an extremely hostile takeover attempt in takeover imagery; e.g., the American Express attempt to take over McGraw-Hill in 1979)   |
| Weak         | An executive who does not adhere to the code of honor in managing trouble with colleagues  |
| White hat    | An honorable executive (cf. "black hat," "outlaw," "pirate," "white knight")   |
| White knight | An honorable executive who supports his colleagues in inter-departmental disputes and rescues executives in distress (cf. "white hat," and "black knight"; "white knight" refers to an acceptable acquirer sought after by a potential acquiree to forestall a hostile takeover in takeover imagery) |
| Wild bunch   | A successful product team known for its "outlaw" behavior; named after the Sam Peckinpah movie of the same name about a notorious band of outlaws in the Old West  |
| Withdrawal   | Unilateral concession of defeat in a "duel" or "shoot-out"   |
| Wizard       | Senior vice president of R&D who has numerous inventions and patents, long hair, and wears loose, hopsack clothing   |
| Wounded list | Executives who have lost individual conflicts in a larger "war" with another department ("wounded list" refers to executives of an acquired firm who develop health or career problems from the deal in takeover imagery)  |

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# The Rise of Factories in Nineteenth-Century Indianapolis<sup>1</sup>

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This paper tests several theories of the rise of factories in 19th century America that differ in their assumptions about (1) the efficiency of early factories relative to artisan shops and (2) the skill, autonomy, and wages of workers in factories. By analyzing data from the manuscript schedules of the Census of Manufactures for Indianapolis in 1850, 1870, and 1880, the authors demonstrate the falsity of the neoclassical economic view that factories triumphed in the 19th century because they were more efficient than small-scale, artisan production in their use of labor-saving technologies and new systems of controlling workers. Early factories were no more efficient than artisan shops, and this was due, in part, to their reliance on essentially the same systems of craft production and labor control as those used by shops. The rise of factories was largely the result of a strategy of early factory owners of increasing output and profits, not by using more efficient technologies or systems of labor control, but by adding more workers and more capital.

Few changes in the U.S. economy have had such a profound effect on the lives of working Americans as the rise of the factory as a system of production in the 19th century. The nation's first factory—a textile mill—was built in 1790 by Samuel Slater in Pawtucket, Rhode Island (Green 1944, p. 231). By 1899 factories made up two-fifths of the nation's industrial establishments (Kirkland 1961, p. 171). Only 2.8% of employed Americans worked in factories in 1810; by 1900 the figure had reached 20.3% (Lebergott 1966, p. 119).

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Although the growth in factory employment throughout the 19th century is well documented, there is little agreement on its causes or consequences. In this article we explore several theories of the rise of factories in 19th-century America that differ in their assumptions about the economic efficiency of early factories relative to artisan shops, and about the skill, autonomy, and wages of workers in factories relative to those in artisanal production. We show that the neoclassical economic view that factories triumphed in the 19th-century because they were more efficient than small-scale, artisan production in their use of labor-saving technologies and new systems of controlling workers is false. We find that early factories were no more efficient than artisan shops, and that this was due, in part, to their reliance on essentially the same systems of craft production and labor control used by shops. We trace the rise of factories to a capitalist strategy of increasing output and profits, not by using more efficient technologies or systems of labor control, but by adding more workers and more capital.

We test theories about the rise of factories with data from 1850 to 1880 for Indianapolis, Indiana, a rapidly industrializing city. We use a data source that has been analyzed by historians in studies of other settings (Laurie and Schmitz 1981; Laurie, Hershberg, and Alter 1981; Atack 1977; Bateman and Weiss 1981; Walsh 1972; Sokoloff 1984) but has rarely been used by sociologists. During the 19th century, the Census of Manufactures was conducted in 1820 and every decade from 1840 through 1890. For each firm with an annual product of at least \$500, the Bureau of the Census collected information on the number of employees, the amount of capital invested, the source of power, the wages paid to employees, and the value of raw materials and products. For this study, we coded and analyzed the original schedules for all Indianapolis firms in 1850, 1870, and 1880.

## THEORETICAL BACKGROUND

There are several competing explanations of the rise of factories. "Efficiency" theory, which is based on neoclassical economics, assumes that the factory was more efficient than earlier putting-out and craft-production techniques and, for this reason, eventually outcompeted hand-powered, small-scale craft production (Ashton 1948, p. 33; Landes 1969, p. 81). In this view, factories in the United States developed out of intense competition during the mid- to late-19th century among many small firms for shares of local and regional product markets (Bain 1944, p. 709; Kirkland 1961, pp. 195–215). Firms that invested capital in technological improvements, such as the conversion from hand to steam or water power or the use of new production methods (e.g., the Bessemer

process in the steel industry) or that used new methods of controlling workers and organizing the work force (e.g., the Waltham system) were able to increase worker productivity and to use workers who were less skilled, although some skilled workers were still needed to install and maintain the new machinery. Being more efficient than their competitors, they were able to sell their products at cheaper prices and obtain greater profits. They reinvested their profits in further technological improvements and in hiring still larger numbers of low-paid, less skilled workers. Large, capital-intensive firms benefited from economies of scale and were eventually able to drive many of their smaller competitors out of business (Bain 1944, p. 709; Cochran and Miller 1960, p. 139; Masters 1969, p. 342; James 1983, p. 434). The factory triumphed, not only because of its adoption of laborsaving technology and machinery, but also because of its development of new systems of controlling workers, including the bureaucratic organization that some theorists see as linked to this form of production (e.g., Blau 1956, p. 19).

Several alternatives to efficiency theory have been advanced. Stephen Marglin (1974, p. 84), in what we label the "social control" theory, argues that the development of factories in Europe during the 18th century had nothing to do with their technical superiority or efficiency, but rather with the need of early capitalists to control workers, limit embezzlement of raw materials, and guarantee for themselves an essential role in the production process. The elaborate specialization of labor and hierarchical organization of production that Marglin sees as characterizing factory production were primarily intended to ensure a role for capitalists as integrators of the separate tasks of their workers into a marketable product (pp. 62, 70). While early factories were not technologically superior to putting-out or craft-production systems, they were more efficient than competing systems in effecting control over workers (p. 84).

Dan Clawson, in what we label the "craft-production" theory, argues that production in early factories differed little from that in artisan shops because factories continued to use craft systems of production and control in which "workers, not foremen or inside contractors, made most of the decisions which were formally the responsibility of the supervisor," for example, inventing and designing the product, planning the work process, and deciding on the speed of production (1980, pp. 126, 132-49, 254, quote on p. 132; see also Nelson 1975, pp. 3-4). Two ways of organizing the craft system of production—both of which left control largely in the hands of skilled craftworkers—were common in early factories. One was inside contracting, whereby contractors were hired to produce something for a given price by a given date. Contractors hired and fired their own workers, set wages, and used the company's machin-

ery, tools, and raw materials (Clawson 1980, p. 71; Buttrick 1952; Pollard 1965, pp. 51–62; Nelson 1975, p. 36).

A second way of organizing craft production in factories—and one sometimes intended to break the independence of contractors—involved the use of foremen, who hired and fired workers, set rates of pay, trained workers, and ordered materials. Foremen had most of the powers of contractors but did not receive a profit based on the productivity of their subordinates (Clawson 1980, pp. 126–27). Contractors and foremen were hired for their craft knowledge. Typically only one authority level—the firm's owner or manager—was above them (Clawson 1980, pp. 128–29; Nelson 1975, p. 45). Despite the supervision of contractors and foremen, workers in early factories retained considerable control over the work process and often imposed their own quotas on productivity, which must have undermined the efficiency of factories or kept it at levels similar to those in artisan shops (Clawson 1980, pp. 126, 149; Montgomery 1979, pp. 10–14).

David Gordon, Richard Edwards, and Michael Reich (1982) have advanced another craft-production theory. These authors argue that the rise of factories had little to do with their technological superiority over craft production. Early factories developed as a result of a capitalist strategy to increase output by increasing the overall number of workers, not by fundamentally transforming their labor or increasing their labor productivity or output per worker. In manufacturing that had a precedent in craft traditions (the chief exception being textiles), factory owners borrowed techniques and control systems already available in small-scale craft production, relied heavily on workers skilled in these techniques, and paid them well. Because of their greater work forces, factories had more output than their smaller competitors but were not necessarily more efficient (Gordon et al. 1982, pp. 79–81, 85).<sup>2</sup>

According to Gordon and his colleagues, early factories borrowed not only the technology of artisan shops but also their systems of controlling workers. Production in most early factories “consisted of the agglomerated operations of small shops rather than integrated production using

<sup>2</sup> Gordon et al. (1982) are not entirely consistent in their position on the efficiency of early factories. They observe that factory supervision meant that the “effective labor input of the workforce vastly increased” (p. 59) but also that “the principle source of output expansion lay . . . in the simple expansion of employment rather than in rising productivity per worker” (p. 81) and that “factories were larger but they were not necessarily more efficient” (p. 88). We have presented what we believe to be the dominant tendency in their analysis—that factories were no more efficient than craft shops due to their reliance on essentially the same craft methods of production and labor control.

subdivided tasks," and systems of controlling workers often replicated those in small shops (Gordon et al. 1982, pp. 86, 91; see also Nelson 1975, pp. 3–4). In addition to the inside contractor and foreman systems, Gordon et al. (1982, p. 91) mention a system of "simple control" (Edwards 1979), in which the capitalist personally supervised nearly all of the operations of the plant so that "the entire firm was [his/her] workshop" (p. 91).

While Clawson (1980, chaps. 5, 6) and Gordon et al. (1982, chap. 4) do not expect early factories to have been any more efficient than artisan shops during the period 1850–80, they argue that in the late 19th century and early 20th century, scientific management and other reforms forced more productivity out of workers, substituted low-paid, semi- and unskilled workers for well-paid craftworkers, and broke down craftworkers' control over production and its pace. Another thoughtful account of the development of factories in the post-1880 period also suggests that scientific management later wrested control away from skilled workers and improved factory efficiency (Nelson 1975, pp. 23, 163).

Another tradition addressing the rise of the factory, which we label the "industrial geography" perspective because of its focus on regional industrial economies, stresses the complexity of "alternative solutions to the problems of production and accumulation" (Scranton 1983, p. 4). While the models above see inputs of labor and technology as affecting outputs or productivity, Philip Scranton posits an "accumulation matrix" of "social and economic factors that together constitute the total situation for production and profit faced by entrepreneurs" (pp. 4–6). Factories develop and industries grow or decline for a multitude of reasons reflecting the complex interplay of these factors—material elements (e.g., raw materials, production processes and technology, labor, transport, marketing), social-contextual elements (state structures; religious beliefs; cultural notions of hierarchy, justice, labor; patterns of family structure), and external elements (disasters, wars, panics, etc.).

Industrial geographers do not view the realization of economies of scale as a necessary condition for the rise of factories. While efficiency theory assumes that firms had alternative technologies available to them from which to choose the most efficient technology, the industrial geography perspective is that these alternatives were often limited, that owners often did not know the full range of techniques available, and that initially chosen technologies inhibited the firm's ability to redirect its strategy to other technologies (Storper and Walker 1989, pp. 55, 57; Scranton 1983, p. 6). As a result, economies of scale "appear only in certain limited cases" and "technological advance is not restricted to such effects" (Storper and Walker 1989, p. 52). Charles Sabel (1982, p. 38–39) argues that "factories . . . did not initially produce goods more cheaply than

[did] other methods of production" and that "the discovery of basic principles of machine design, their application to large- or small-scale production, and the creation of efficient management techniques were all independent of the creation of the factory system by 19th century capitalists." In an extensive study of the textile industry, Scranton (1989, p. 7) finds that bulk-output mills in Lowell, Massachusetts, built on economies of scale, while batch specialists in Philadelphia relied on a much more flexible strategy that involved shifting production of specialty products to meet changing demand.

Scranton's (1989, p. 502) conclusion that "complex phenomena like industrial change can best be appreciated through inclusive narratives that reject the temptations of ready-made theory and the reductionism of 'other things being equal' simplification" captures this perspective's tendency to eschew the broad generalizations made by the three theories above. Since this perspective makes few generalizations and relies methodologically on intensive case studies of particular industries, firms, and regions, we can test only its assumption that factories did not arise due to their efficiency or social control advantages over other forms of production.

## THE SETTING

Indianapolis is well suited to testing these contrasting models of the rise of the factory. The period under consideration here (1850–80) takes Indianapolis from a small backwoods town with little manufacturing to its development as one of the nation's important manufacturing centers. In 1850, the first year for which we have census data, Indianapolis had been in existence for less than 30 years, having been founded in a dense wilderness 60 miles from the nearest settlement in 1821 as the intended capital of Indiana. Like most other cities on the frontier, Indianapolis in 1850 lagged behind northeast cities in industrialization (Walsh 1972, pp. vi–vii; Sokoloff 1984, p. 356) but rapidly began to catch up. The average manufacturing firm in Indianapolis in 1850 had 8.0 employees, compared with 12.9 for Philadelphia, the nation's second largest city (the only city for which strictly comparable data exist). By 1880 Indianapolis firms had 14.4 employees on average, compared with 15.6 in Philadelphia (Laurie and Schmitz 1981, p. 66). Indianapolis had a smaller percentage of manufacturing employees in factories (firms using steam engines or water wheels) in 1850 than Philadelphia (24% vs. 28%) but a slightly larger percentage by 1880 (66% vs. 64%; Laurie and Schmitz 1981, p. 49). In 1850 average capitalization per firm in Indianapolis was \$2,307, compared with \$7,078 in Philadelphia. By 1880 capitalization in Indianapolis had grown to \$12,018, compared with \$15,362 in Philadelphia (Laurie

and Schmitz 1981, p. 66). Indianapolis by 1880 was the nation's twenty-fourth largest city and ranked twenty-first in industrial productivity (value of products minus cost of raw materials; U.S. Bureau of the Census 1883, p. 379).

From the 1840s through the 1870s, middle-sized cities like Indianapolis, Reading (Pennsylvania), Lynn (Massachusetts), and Syracuse (New York) industrialized at an even faster rate than urban giants like New York, Philadelphia, and Chicago (Montgomery 1967, chap. 1; Gordon 1978, p. 39).<sup>3</sup> Middle-sized cities often served as way stations in the migration of labor from the country to the city, so that the labor needs of expanding factories in these areas were the first to be met. From 1860 to 1870, employment in manufacturing increased by 53% in the nation's three largest cities, while it increased by 79.5% in the cities ranked twenty-first through fiftieth in population (Gordon 1978, p. 39). Although middle-sized cities may have industrialized more rapidly than larger ones, comparison of trends in Indianapolis with those in Philadelphia suggests that many of the same processes—the growth of large firms, the increasing use of water- and steam-powered technologies, and increasing capitalization—occurred in both communities, although the timing and rates of change differed somewhat (Laurie and Schmitz 1981; Laurie et al. 1981).

In a separate analysis of the data to be examined below, we have shown that from 1850 to 1880 manufacturing in Indianapolis became increasingly competitive. The expansion of the railroad network during the 1850s, 1860s, and 1870s brought Indianapolis firms into competition with firms in other towns and cities in the state and region. At the same time, the number of manufacturers grew dramatically, making markets even more competitive (Robinson 1989). Given the importance in efficiency theory of competition as a stimulus to increased efficiency of firms, Indianapolis is a setting where this theory would predict that there would be improvements in the efficiency of manufacturing over time and that the greater efficiency of factories over craft production would be advantageous (Bain 1944, p. 709; Kirkland 1961, pp. 195–215).

Indianapolis is also well suited as a setting for this study because it had a diversity of both industries and forms of production. No single industry dominated manufacturing in the city throughout the period considered here. Moreover, as studies of Milwaukee and Philadelphia (Walsh

<sup>3</sup> Figures from the published tables of the Census of Manufactures of 1880, given in table A1, suggest that manufacturing in Indianapolis was within the range of other middle-sized cities. The figures for Indianapolis differ somewhat from those reported below because the published tables are less accurate than those computed from the original manuscript schedules (Walsh 1970, p. 7).

1972, p. x; Laurie and Schmitz 1981, p. 59) have also found, manufacturing in Indianapolis reflected a mix of old and new forms of production—including small artisan shops, larger hand-powered manufactories, and water- or steam-powered factories. Although the proponents of the efficiency theory clearly expect efficiencies and economies of scale to be realized even among factories with very small work forces and capital investments (Ashton 1948; Landes 1969; Atack 1977; Sokoloff 1984), our analyses of Indianapolis, from its earliest steps toward industrialization to its emergence as an important manufacturing city, allow assessment of economies of scale in firms over a broad range of employment and capitalization and at several points in the city's industrial development.

## DATA AND METHODS

### The Census of Manufactures

The data are from the original manuscript schedules of the federal Census of Manufactures for Indianapolis for 1850, 1870, and 1880.<sup>4</sup> Indianapolis had not been founded when the 1820 manufacturing census was conducted. No census was taken in 1830, and no records are extant for Indianapolis in 1840. The 1860 census of Indianapolis failed to contact firms in several key industries (Madison 1972, p. 140–43) and thus cannot

<sup>4</sup> The Census of Manufactures included firms with a gross annual product of \$500 or more, thus the possibility exists of selection bias on the bottom of the distribution of firms. There are several reasons for believing that this has little effect on our findings. First, a gross annual product of \$500 was quite small in 1850. Out of this amount an owner would have had to pay the cost of raw materials and employees and extract a profit on which to live. Given that the going wage for workers in artisan shops (see table 7 below) was \$288 annually in 1850, it is unlikely that many firms that did not have a gross product of more than \$500 could have existed for any length of time. Second, since the \$500 cutoff for inclusion was constant from 1850 to 1880, inflation in that period caused the census to become inclusive of the very smallest firms, including, in 1870, firms with an annual product of \$327 and up (in constant 1850 dollars; Hoover 1960) and in 1880 firms producing \$416 and up. Since our findings with respect to the relative efficiency of artisan shops hold for all three census years, it is unlikely that these findings can be explained by selection bias. Third, examination of the distribution of gross annual product for firms included in the census for Indianapolis does not suggest the bunching up at the bottom end of the distribution that would be expected if there were a large number of firms below \$500. Rather, among artisan shops the distribution tapers off at the bottom (approximately 10% of artisan shops—hand-powered firms with five or fewer employees—are in the \$500 to \$1,000 range in each year). Fourth, the only type of firm that is affected by the \$500 cutoff is artisan shops. The firms with the lowest gross annual product in the other types of firms discussed below (i.e., manufactories and factories) had at least \$1,000 in annual product in each census year, suggesting that it is unlikely that any firms of this sort were excluded by the \$500 cutoff.

be analyzed. The data include 103 firms for 1850, 635 for 1870, and 808 for 1880.

### Measures

The manufacturing censuses include detailed information on the characteristics of firms. *Labor* is the average number of people (women, men, and children) employed during the year by the firm (Wright 1900, pp. 318–20). As we note below, this variable must be adjusted upward to include the imputed labor of the firm's owner and managerial personnel. *Capital* is the amount of capital invested in the firm. As Laurie and Schmitz (1981, p. 71) note, capital investment "represented the vehicle for introducing a substantial proportion of the technological improvements of the period." To adjust for inflation on this and all other monetary variables, 1870 and 1880 dollars are converted to constant 1850 dollars using the consumer price index developed by Hoover (1960, p. 142). Another important aspect of technological development and mechanization is the use of water- or steam-powered technologies (*water/steam power*) as opposed to hand-powered methods. This is measured with a dummy variable in our analyses. *Value added*—the standard output variable used by economists (Atack 1977, p. 344)—is the total value of products less the total cost of raw materials used, fuel used, and other costs involved in manufacturing (but not including labor) as an estimate of the total value created in the process of manufacture.

In some of our tabular presentations we use a typology of work settings developed by Laurie and Schmitz (1981, pp. 53–66) that takes into account both the number of employees and the source of power. A *large factory* is a firm that uses water wheels or steam engines and employs 26 or more workers. A *small factory* uses water or steam power and employs 25 or fewer employees. A *large manufactory* employs 26 or more workers and does not use steam or water power. A *small manufactory* employs 6–25 workers and does not use water or steam. Although Laurie and Schmitz (1981) refer to establishments in this category as "sweatshops," our own examination of the working conditions of these firms in terms of hours worked and wages did not suggest that the employees were any more likely to be "sweated" than those in larger or smaller hand-powered firms. Finally, an *artisan workshop* employs five or fewer workers and does not use water or steam power. While the distinction between artisan shops and small manufactories is arbitrary, our own analyses of wages (see below) and information available in 1870 on the use of hand- or foot-powered machinery (37% of artisan shops used such machinery as opposed to 54% of small manufactories) suggests that very small hand-powered shops should be distinguished from larger ones (see also,



Sokoloff [1984, pp. 357–59] who makes the same distinction). As a further check on the validity of the label “artisan workshop,” we searched for all of the artisan shops in 1880 in a contemporary listing of firm descriptions and histories (*Manufacturing and Mercantile Resources* 1883). The descriptions were consistent with the “artisan shop” label, many mentioning the practical training of the owners, their personal supervision of the work process, and the skill of their employees.<sup>5</sup>

*Average yearly wages* are the total annual wages paid by the firm divided by the number of employees. The employer’s estimate of the value of room and board, the principal “fringe benefit” of the time, is included with wages when room and board were provided by the employer. For 1850, average monthly wages are divided by the number of employees and multiplied by 12 to estimate average yearly wages. For 1870 and 1880, the total wage outlay per year is divided by the number of employees. *Industry* is coded in 20 categories, not all of which are large enough to be separately analyzed here, following a classification scheme developed by Hershberg and Dockhorn (1976).

### Reliability

The 1870 Census of Manufactures for Indianapolis was actually taken twice because the Census Bureau decided the returns were incomplete the first time (Barrows 1977, p. 10). Seventy-five schedules have survived from the first census that could be matched with their returns in the second census six months later. These duplicate cases afford a rare opportunity to assess the reliability of variables in the census at least for that year. The correlations between values for the first and second censuses are given in table 1. All correlations are within the acceptable range for reliability coefficients. In addition, 94% of firms were identically classified in the two censuses on the work-setting variable. Unfortunately, there is no information on why the manuscript schedules for these particular 75 firms survived. The 75 firms had more employees and greater investment in capital than the typical firm in 1870, and larger firms may have kept more accurate records than smaller firms, but the correlations

<sup>5</sup> Typical is this description of William Langsenkamp’s coppersmith shop: “The business was established by its present proprietor in 1868, and the premises occupied by him comprise one floor 23 × 80 feet . . . where four skilled and experienced coppersmiths are employed in the production of brew kettles, gas generators, soda fountains, beer pumps, etc. Mr. Langsenkamp . . . learned the trade and was employed by the firm of Cotterell & Knight prior to embarking in business on his own account. He is thoroughly conversant with the details of the business” (*Manufacturing and Mercantile Resources* 1883, p. 579).

TABLE 1  
CORRELATIONS OF VARIABLES ACROSS TWO  
CENSUSES OF INDIANAPOLIS FIRMS, 1870

| Variable                             | Correlation |
|--------------------------------------|-------------|
| Labor ( <i>L</i> ) .....             | .99         |
| Capital ( <i>K</i> ) .....           | .96         |
| Water/steam power ( <i>T</i> ) ..... | .97         |
| Value added ( <i>V</i> ) .....       | .94         |
| Average yearly wages .....           | .71         |
| No. of firms .....                   | .75         |

suggest a high degree of reliability in the measures employed in this analysis.

### Statistical Analysis

Following Blalock's (1979, pp. 241–42) argument that most social scientific research has as its objective inference about causal processes as much inference to fixed populations, we use tests of significance even though we have census data (see also, Attack 1977; Laurie and Schmitz 1981; James 1983).

## RESULTS

### The Rise of Factories

Throughout the 30-year period considered here, manufacturing in Indianapolis took place in a mixture of old and new forms of production. In 1850 a quarter of the city's 819 manufacturing employees worked in factories, most of them in small factories (see table 2). Large manufactories employed one-quarter of the manufacturing work force, and small manufactories another one-third. Less than one-fifth of industrial employees worked in artisan shops, although such firms made up over half of the total number of firms in Indianapolis.

While the city's economy experienced many ups and downs during the next 30 years (including the panics of 1857 and 1873 and war-induced prosperity during the 1860s and early 1870s), factory employment grew dramatically. By 1880, fully two-thirds of the city's manufacturing work force of 11,642 employees worked in factories. Employment in large factories increased fifteenfold—from 4% to 57%—during these three decades. As table 3 shows, the growth in factory employment was uneven across industries. Some industries (lumber and wood, machine tools and

TABLE 2  
DISTRIBUTION OF FIRMS AND EMPLOYEES BY WORK SETTING IN INDIANAPOLIS, 1850-80

| WORK SETTING            | PERCENTAGE OF FIRMS |                   |                   |                   | PERCENTAGE OF EMPLOYEES |                      |  |  |
|-------------------------|---------------------|-------------------|-------------------|-------------------|-------------------------|----------------------|--|--|
|                         | 1850<br>(N = 103)   | 1870<br>(N = 635) | 1880<br>(N = 808) | 1850<br>(N = 819) | 1870<br>(N = 6,063)     | 1880<br>(N = 11,642) |  |  |
| Artisan workshop .....  | 51                  | 57                | 56                | 18                | 13                      | 8                    |  |  |
| Small manufactory ..... | 23                  | 22                | 23                | 32                | 24                      | 18                   |  |  |
| Large manufactory ..... | 4                   | 0                 | 2                 | 27                | 2                       | 8                    |  |  |
| Small factory .....     | 20                  | 14                | 11                | 20                | 16                      | 9                    |  |  |
| Large factory .....     | 1                   | 7                 | 8                 | 4                 | 44                      | 57                   |  |  |

NOTE.—Artisan workshop = less than 6 employees, hand power; small manufactory = 6-25 employees, hand power; large manufactory = 26 or more employees, hand power; small factory = 1-25 employees, steam or water power; large factory = 26 or more employees, steam or water power.

TABLE 3

PERCENTAGE OF EMPLOYMENT IN FACTORIES BY INDUSTRY, INDIANAPOLIS, 1850-80

| INDUSTRY                         | PERCENTAGE EMPLOYED IN FACTORIES |      |      |
|----------------------------------|----------------------------------|------|------|
|                                  | 1850                             | 1870 | 1880 |
| All firms .....                  | 24                               | 60   | 66   |
| Food .....                       | 66                               | 78   | 81   |
| Refined food .....               | . . .                            | 58   | 87   |
| Tobacco .....                    | . . .                            | 9    | 0    |
| Skins .....                      | 0                                | 30   | 0    |
| Clothing .....                   | 0                                | 0    | 0    |
| Shoes and boots .....            | 0                                | 0    | 0    |
| Hats and caps .....              | 0                                | 0    | 0    |
| Textiles .....                   | 100                              | 100  | 75   |
| Machine tools and hardware ..... | 53                               | 94   | 87   |
| Iron and steel .....             | 0                                | 88   | 93   |
| Blacksmiths .....                | 0                                | 0    | 0    |
| Other metalworking .....         | 0                                | 26   | 10   |
| Lumber and wood .....            | 32                               | 59   | 79   |
| Home furnishings .....           | 47                               | 92   | 74   |
| Construction .....               | 0                                | 28   | 25   |
| Fuel .....                       | . . .                            | 100  | 100  |
| Chemicals .....                  | . . .                            | 60   | 76   |
| Paper .....                      | 100                              | 88   | 100  |
| Printing/publishing .....        | 32                               | 75   | 89   |
| Others .....                     | 0                                | 68   | 77   |

NOTE.—Ellipses indicate that there are no firms in this industry.

hardware, home furnishings, iron and steel, and printing and publishing) experienced great gains in factory employment, while others (clothing, shoes and boots, hats and caps) did not adopt water- or steam-powered technologies throughout the period considered here. Employment in some of the new industries that had developed since 1850 (refineries, fuel, chemicals) was overwhelmingly in factories, while employment in another new industry (tobacco) was almost entirely in hand-powered shops and manufactories. Despite the dramatic movement of employees into factories, there was little change in the distribution of firms (see table 2). The city had roughly the same proportions of factories, manufactories, and artisan shops in 1880 as in 1850.

### Efficiency and Economies of Scale

If the efficiency theory is correct that firms with large numbers of workers and/or sizable capital investments were more efficient in extracting out-

put from their investments in labor and capital than firms with small work forces and limited capital investments, then proportional increases in inputs (e.g., investments in labor and capital) in the former firms should lead to disproportionately large increases in outputs (value added). The standard econometric method of testing for greater efficiency or economies of scale is to estimate the Cobb-Douglas (1928) production function, which treats output as a function of two inputs—labor and capital:

$$V = AL^aK^b,$$

where  $V$  is output (value added),  $L$  is labor (firm size),  $K$  is the amount of capital invested,  $a$  and  $b$  are the elasticities for labor and capital, respectively, and  $A$  is total factor productivity. If greater investments in these inputs yield disproportionately large returns in output, there are economies of scale. If the scale coefficient,  $a + b$ , is significantly larger than one, economies of scale exist. If  $a + b$  is significantly less than one, diseconomies of scale exist.

To this simple formulation, we add the use of water- or steam-powered technologies—the defining characteristic of factory production—as a productive input (Laurie and Schmitz 1981, p. 72). The equation is

$$V = AL^aK^be^{cT},$$

where  $T$  is a dummy variable (1 for steam or water power and 0 for hand power). If efficiency theory is correct, the coefficient  $c$  will be positive and represents the efficiency advantage of steam or water power over hand power; specifically, the percentage increase in output due to the use of water- or steam-powered technologies.

The Cobb-Douglas production function captures efficiencies deriving from both technology and labor control. If there are significant economies of scale, this may be due to the use of laborsaving technologies, or to the use of a control system that forces (or motivates) each worker to be more productive, or to both. Efficiency theory assumes that large-scale, capital-intensive, factory production was more efficient than small-scale, labor-intensive, artisanal production because of both its use of laborsaving technologies and its adoption of new methods of controlling workers. Marglin's (1974) control theory assumes that factories were no more technologically efficient than craft production, but that their use of hierarchical forms of organization and specialization of labor to control workers gave them greater efficiency than craft production. The craft-production theory assumes little difference between factories and artisan shops in their efficiency because they used similar craft systems of production (technology) and labor control.

A further refinement of the production function takes into account the differential productivity of men, women, and children.<sup>6</sup> Women, because of their intermittent (and frequently brief) participation in the work force, and children, because of their youth, may have less experience or skill, and hence lower output per worker, than men. Firms with more women and children may, for this reason, be less efficient than those with fewer. Thus the composition of the firm's work force needs to be controlled in the production function. Some researchers take this into account by assuming that women and children were 40% or 50% as productive as men (and weight their labor accordingly), because they were paid these percentages of men's wages. While in a separate analysis of these data for Indianapolis (Robinson and Wahl 1990) it was shown that women's and children's wages as a percentage of men's were roughly in this range, many factors other than productivity, including discrimination, may make women's and children's wages low. Thus we do not weight women and children as some proportion of men, but instead introduce a control for the proportion of men in the firm to take the composition of the work force into account (see Laurie and Schmitz 1981, p. 80). The addition of this variable requires an extended Cobb-Douglas function, derived by dividing both sides of the equation by  $L$ :

$$V/L = AL^{a+b-1}(K/L)^bT^c\exp(dM).$$

This production function is estimated via an OLS regression of logged value added divided by labor ( $V/L$ ) on logged labor ( $L$ ), logged capital divided by labor ( $K/L$ ), logged proportion male ( $M$ ), and a dummy variable for power ( $T$ ). The contribution of capital is indicated by the coefficient  $b$ . The scale coefficient,  $a + b$ , is computed as one plus the coefficient for logged labor. The  $t$ -test for the coefficient of logged labor gives the significance of the scale parameter,  $a + b$ ; that is, whether it is larger or smaller than one (Laurie and Schmitz 1981, p. 80; Sokoloff 1984, p. 366). To the extent that men have higher output per worker than women and children, the coefficient  $d$  will be positive. In estimating this production function within industries or work settings that overwhelmingly employed men (more than 90%), the proportion of men (never significant in such cases) is omitted.<sup>7</sup>

Before the production function can be estimated, a further issue needs to be resolved. When employers were asked to report the "number of

<sup>6</sup> Although it would be useful to have information on other characteristics of workers, the Census of Manufactures did not record information on the distributions of ethnicity/race, education, and skill levels.

<sup>7</sup> Firms in the miscellaneous "other industries" category are excluded from these analyses because the category contained too heterogeneous a mixture of industries.

hands employed," they almost certainly excluded themselves and probably, given the reference to "hands," the firm's officers and managerial or supervisory personnel as well. Exclusion of the labor of owners and/or other management personnel overstates the output per worker in the very smallest firms and biases the scale coefficients in the production functions downward—that is, it makes it more difficult to find economies of scale. We use two independent methods of taking such labor into account. The first method follows Sokoloff (1984, p. 375) in adding one owner per firm to the measure of labor.<sup>8</sup> The second follows Attack (1977, p. 344) in assuming that, in addition to the owner, salaried managerial personnel were excluded in reporting the number of "hands." This method involves adding to the measure of labor an adjustment for the excluded labor based on the ratio of managerial personnel ("officers, firm members, and clerks") to all employees in each industry as reported in the 1890 census (U.S. Bureau of the Census 1895, pp. 250–57), subject to each firm's being assigned at least one owner/manager.<sup>9</sup>

The coefficients for the Cobb-Douglas production function, estimated by Sokoloff's method on the first line and Attack's on the second, are given in table 4. The two methods yield similar findings. Among all firms, there were no significant economies of scale (i.e.,  $a + b \geq 1$ ) in any of the three census years. In 1850, there were significant diseconomies of scale in production ( $a + b < 1$ ). Large firms with large investments

<sup>8</sup> Since the 1850, 1870, and 1880 censuses did not include a direct question on the names of the firm owner(s), we assumed, like Sokoloff (1984, p. 375), that each firm had one owner. As Sokoloff (1984, pp. 369, 375) notes, the second (or third) owner would be less likely to contribute to output than the first, and since the number of owners is probably only slightly correlated with the number of employees, the assumption of a single owner probably imparts only a slight upward bias to the scale coefficients, i.e., makes it more likely that we will find economies of scale.

<sup>9</sup> Computing the proportion of men in firms was different for the two methods. Sokoloff (1984, p. 375) assumed that the firm owner was a male, added one to the number of men employees, and divided by the total number of employees plus one (for the owner). We generally assumed this as well, but since some of the firm titles listed the name of the owner, we took into account the few firms which had female owners (mainly milliners, dressmakers, and bakers), adding zero to the number of men employees and dividing by the total number of employees plus one (for the owner). We estimated the proportion of men differently for Attack's (1977) method of imputing entrepreneurial/supervisory labor. Since in the 1890 census male officers/managers were separated from females, we took the proportion that men made up of officers/managers, multiplied this by the number of imputed officers/managers, added this to the number of men employees, and divided the sum by the total number of employees in the firm plus the number of imputed officers/managers. Since estimation of the production function requires that the log be taken of the proportion of men, and since the log of 0 is undefined, we assumed that the few firms with no men had .01 men. Additional analyses excluding these firms yielded virtually identical findings to those reported in text.

TABLE 4  
COBB-DOUGLAS PRODUCTION FUNCTION ESTIMATES BY INDUSTRY,  
INDIANAPOLIS, 1850-80

| Year and Industry              | <i>b</i> | <i>a + b</i> | <i>c</i> | <i>d</i> | <i>R</i> <sup>2</sup> | <i>N</i> |
|--------------------------------|----------|--------------|----------|----------|-----------------------|----------|
| 1850:                          |          |              |          |          |                       |          |
| All firms 1 <sup>a</sup> ..... | .173*    | .767*        | .098     | .164     | .150                  | 100      |
| All firms 2 <sup>b</sup> ..... | .197*    | .707*        | .135     | .099     | .216                  | 100      |
| Lumber and wood 1 .....        | -.117    | .766         | .779     | ...      | .184                  | 25       |
| Lumber and wood 2 .....        | -.117    | .766         | .777     | ...      | .184                  | 25       |
| 1870:                          |          |              |          |          |                       |          |
| All firms 1 .....              | .315*    | 1.021        | .001     | .196*    | .301                  | 579      |
| All firms 2 .....              | .338*    | .981         | .026     | .281*    | .328                  | 579      |
| Food 1 .....                   | .355*    | 1.060        | -.001    | .236     | .369                  | 54       |
| Food 2 .....                   | .348*    | 1.018        | -.016    | .474     | .351                  | 54       |
| Tobacco 1 .....                | .417*    | .990         | .0004    | -.279    | .292                  | 31       |
| Tobacco 2 .....                | .401*    | .952         | .056     | -.344    | .256                  | 31       |
| Skins 1 .....                  | .508*    | .996         | -.860    | ...      | .223                  | 23       |
| Skins 2 .....                  | .503*    | .964         | -.867    | ...      | .219                  | 23       |
| Clothing 1 .....               | .154     | 1.168        | ...      | .495*    | .397                  | 44       |
| Clothing 2 .....               | .081     | 1.075        | ...      | .647*    | .403                  | 44       |
| Shoes and boots 1 .....        | .181*    | .979         | ...      | ...      | .063                  | 63       |
| Shoes and boots 2 .....        | .164     | .779*        | ...      | ...      | .144                  | 63       |
| Machine tools 1 .....          | .341*    | .955         | .089     | .803     | .355                  | 32       |
| Machine tools 2 .....          | .354*    | .939         | .068     | .890     | .361                  | 32       |
| Blacksmith 1 .....             | .241     | .656         | ...      | ...      | .172                  | 32       |
| Blacksmith 2 .....             | .233*    | .628         | ...      | ...      | .238                  | 32       |
| Metalworking 1 .....           | .094     | .964         | .366     | ...      | .218                  | 20       |
| Metalworking 2 .....           | .092     | .917         | .378     | ...      | .196                  | 20       |
| Lumber and wood 1 .....        | .241*    | 1.025        | .229     | ...      | .250                  | 81       |
| Lumber and wood 2 .....        | .241*    | 1.017        | .228     | ...      | .242                  | 81       |
| Construction 1 .....           | .218*    | .961         | -.081    | ...      | .126                  | 101      |
| Construction 2 .....           | .218*    | .945         | -.109    | ...      | .119                  | 101      |
| Printing/publishing 1 .....    | .094     | 1.103        | -.646*   | .003     | .253                  | 21       |
| Printing/publishing 2 .....    | .105     | 1.004        | -.568    | .214     | .303                  | 21       |
| 1880:                          |          |              |          |          |                       |          |
| All firms 1 .....              | .252*    | .954         | -.053    | .189*    | .221                  | 725      |
| All firms 2 .....              | .272*    | .924*        | -.036    | .182*    | .253                  | 725      |
| Food 1 .....                   | .144     | 1.086        | -.130    | .857*    | .239                  | 109      |
| Food 2 .....                   | .149     | 1.017        | -.143    | .984*    | .229                  | 109      |
| Tobacco 1 .....                | .318*    | .979         | ...      | .394     | .123                  | 42       |
| Tobacco 2 .....                | .310*    | .919         | ...      | .527     | .166                  | 42       |
| Skins 1 .....                  | .186     | 1.221        | ...      | ...      | .172                  | 24       |
| Skins 2 .....                  | .175     | 1.155        | ...      | ...      | .129                  | 24       |
| Clothing 1 .....               | .252     | 1.002        | ...      | .208*    | .437                  | 44       |
| Clothing 2 .....               | .212     | .970         | ...      | .332*    | .525                  | 44       |
| Shoes and boots 1 .....        | .276*    | .951         | ...      | ...      | .204                  | 77       |
| Shoes and boots 2 .....        | .270*    | .769*        | ...      | ...      | .406                  | 77       |
| Machine tools 1 .....          | .186*    | .997         | -.065    | ...      | .109                  | 43       |



TABLE 4 (Continued)

| Year and Industry           | <i>b</i> | <i>a + b</i> | <i>c</i> | <i>d</i> | <i>R</i> <sup>2</sup> | <i>N</i> |
|-----------------------------|----------|--------------|----------|----------|-----------------------|----------|
| Machine tools 2 .....       | .186*    | .990         | -.067    | . . .    | .108                  | 43       |
| Blacksmith 1 .....          | .169     | .648*        | . . .    | . . .    | .183                  | 32       |
| Blacksmith 2 .....          | .156     | .553*        | . . .    | . . .    | .356                  | 32       |
| Metalworking 1 .....        | .255*    | .943         | -.123    | .517     | .226                  | 40       |
| Metalworking 2 .....        | .251*    | .911         | -.150    | .513     | .233                  | 40       |
| Lumber and wood 1 .....     | .280*    | .840*        | .278     | .202     | .258                  | 79       |
| Lumber and wood 2 .....     | .281*    | .832*        | .276     | .211     | .260                  | 79       |
| Home furnishings 1 .....    | -.030    | 1.014        | .030     | .328     | .034                  | 28       |
| Home furnishings 2 .....    | -.026    | .996         | .025     | .341     | .035                  | 28       |
| Construction 1 .....        | .265*    | .929         | -.111    | .083     | .157                  | 98       |
| Construction 2 .....        | .262*    | .911         | -.117    | .130     | .160                  | 98       |
| Printing/publishing 1 ..... | .304*    | 1.046        | -.206    | .397     | .180                  | 29       |
| Printing/publishing 2 ..... | .292*    | 1.007        | -.212    | .365     | .154                  | 29       |

NOTE.—All monetary variables are expressed in 1850 constant dollars. Ellipses indicate that this variable was not included in the equation.

<sup>a</sup> In each industry, 1 indicates that imputed labor of the firm owner is added.

<sup>b</sup> In each industry, 2 indicates that imputed entrepreneurial/managerial labor is added.

\*  $P < .05$ .

of capital had lower than proportional output for their input than did small, less capitalized firms. In 1870, there were no significant economies or diseconomies of scale—that is, large firms with large capital investments were only equally as efficient as small firms supported by small amounts of capital. In 1880, Attack's method finds significant diseconomies of scale, while Sokoloff's finds neither economies nor diseconomies. The introduction of water- or steam-powered technologies (the defining characteristic of factories) yielded no greater output—if we control for scale, capitalization, and the proportion of men—in any of the three census years.

In 1870 and 1880, men had significantly more output per worker than women and children, no doubt reflecting women's intermittent work force involvement and children's short careers, situations that probably resulted in these groups having less experience and skill than men. The proportion of males is not significant in 1850, probably because we cannot separate boys from men in the 1850 data.

Economies of scale could more reasonably be expected among firms competing to produce similar products, thus production functions within industries are of more interest than those for all firms. The number of firms in specific industries in 1850 is very small, so we estimate the production function in this year only for lumber and wood production,

the only industry with 20 or more firms. In 1870 and 1880, we estimate the production function in all industries with at least 20 firms.<sup>10</sup>

In no industry in any year were there significant economies of scale or was there a significant return to the use of steam- or water-powered technologies. Diseconomies of scale within industries were almost as rare. With the exception of lumber and wood production in 1880, diseconomies were limited to boot- and shoemaking and blacksmithing, neither of which adopted factory (steam- or water-driven) technologies throughout this period in Indianapolis (see table 3).<sup>11</sup>

The finding of constant returns to scale within industries is not unique to Indianapolis. Laurie and Schmitz's (1981, pp. 82–83) study of Philadelphia during the same period also found no economies of scale in any industry. In studies of periods that overlap with ours (1820 and 1832 and 1850, and 1850 and 1860, respectively), Atack (1977) and Sokoloff (1984), found economies of scale only among very small firms, and these were rapidly exhausted as plant size and capitalization increased. To test for the existence of tipping points up to which economies of scale might have been realized, we also estimated the Cobb-Douglas function within each of the work settings. Unfortunately, the small number of firms in each industry prohibits estimation of the production function within work settings in specific industries.<sup>12</sup> Because the distributions of the labor variable are truncated (by definition) in the estimation of the production function within work settings, coefficients for labor and capital cannot be compared across work settings or over time within the same work setting. Nonetheless, these analyses are useful in testing for economies of scale within hand-powered and steam- or water-powered firms of various sizes.

There were no significant economies of scale even in smaller firms in 1850 and 1880, regardless of whether firms were powered by hand or by steam or water (see table 5). In 1870, only small manufactories (i.e., intermediate sized, hand-powered firms) had significant economies of scale, and this is found only using Sokoloff's method of imputing the

<sup>10</sup> We also conducted analyses to control for the specific product manufactured by the firm within each industry category. None of these analyses found economies of scale in any industry (details available on request).

<sup>11</sup> Sokoloff (1984) restricted his analysis to firms operating full-time. In the absence of a direct measure of full-time operation in either the 1850 or 1870 data, we are reluctant to assume, as he did, that the least productive firms were operating part-time. In 1880, when a direct measure is available, restriction of the sample to only those firms operating full-time 12 months a year resulted in very similar estimates of scale returns to those based on all firms.

<sup>12</sup> We defined the work settings within which these functions are estimated without adding imputed labor, so that the functions estimated with the two methods are based on the same samples.

TABLE 5

COBB-DOUGLAS PRODUCTION FUNCTION ESTIMATES BY WORK SETTING,  
INDIANAPOLIS, 1850-80

| Work Setting                      | <i>b</i> | <i>a + b</i> | <i>d</i> | <i>R</i> <sup>2</sup> | <i>N</i> |
|-----------------------------------|----------|--------------|----------|-----------------------|----------|
| 1850:                             |          |              |          |                       |          |
| Artisan shop 1 <sup>a</sup> ..... | -.057    | .704         | ...      | .038                  | 50       |
| Artisan shop 2 <sup>b</sup> ..... | .013     | .471*        | ...      | .112                  | 50       |
| Small manufactory 1 .....         | .006     | .287         | -.035    | .162                  | 24       |
| Small manufactory 2 .....         | .022     | .360         | -.044    | .225                  | 24       |
| Small factory 1 .....             | .655*    | .824         | ...      | .410                  | 21       |
| Small factory 2 .....             | .664*    | .785         | ...      | .425                  | 21       |
| 1870:                             |          |              |          |                       |          |
| Artisan shop 1 .....              | .292*    | 1.134        | .116     | .230                  | 326      |
| Artisan shop 2 .....              | .334*    | .973         | .213*    | .265                  | 326      |
| Small manufactory 1 .....         | .246*    | 1.412*       | .486*    | .329                  | 131      |
| Small manufactory 2 .....         | .275*    | 1.184        | .353*    | .289                  | 131      |
| Small factory 1 .....             | .434*    | .932         | .564*    | .314                  | 81       |
| Small factory 2 .....             | .414*    | .916         | .729*    | .308                  | 81       |
| Large factory 1 .....             | .635*    | .903         | .387*    | .492                  | 38       |
| Large factory 2 .....             | .618*    | .902         | .471*    | .475                  | 38       |
| 1880:                             |          |              |          |                       |          |
| Artisan shop 1 .....              | .247*    | .875*        | .144*    | .204                  | 392      |
| Artisan shop 2 .....              | .272*    | .822*        | .166*    | .266                  | 392      |
| Small manufactory 1 .....         | .269*    | 1.016        | .224*    | .271                  | 173      |
| Small manufactory 2 .....         | .280*    | .990         | .226*    | .284                  | 173      |
| Large manufactory 1 .....         | .272     | .648         | .146     | .363                  | 19       |
| Large manufactory 2 .....         | .270     | .630         | .184     | .404                  | 19       |
| Small factory 1 .....             | .237*    | 1.160        | .416     | .226                  | 79       |
| Small factory 2 .....             | .230*    | 1.109        | .439     | .215                  | 79       |
| Large factory 1 .....             | .069     | .937         | .855*    | .198                  | 62       |
| Large factory 2 .....             | .071     | .931         | 1.150*   | .210                  | 62       |

NOTE.—All monetary variables are expressed in 1850 constant dollars. Artisan workshop = less than 6 employees, hand power; small manufactory = 6-25 employees, hand power; large manufactory = 26 or more employees, hand power; small factory = 1-25 employees, steam or water power; large factory = 26 or more employees, steam or water power. Ellipses indicate that this variable was not included in the equation.

<sup>a</sup> In each industry, 1 indicates that the imputed labor of the firm owner is added.

<sup>b</sup> In each industry, 2 indicates that imputed entrepreneurial/managerial labor is added.

\* *P* < .05.

owner's labor. In 1870, as in the other census years, neither artisan shops, large manufactories, nor factories of any size showed significant returns to scale.<sup>13</sup> In additional analyses among all hand-powered firms in 1870, we found no significant economies of scale across the full range

<sup>13</sup> We also tested for economies of scale making additional breaks within factories (i.e., 15 or fewer employees, 16-25, 26-50, and 51 or more) but uncovered no economies of scale.

of firm sizes (the scale coefficients were 1.056 using Sokoloff's method and .999 using Attack's). Thus the scale economies in 1870 are limited to hand-powered firms of intermediate size. Moreover, there is no tendency for such firms to show economies of scale in either 1850 or 1880, which suggests that whatever economies may have been realized in such firms in 1870 were not stable over time.

### Strategies for Increasing Output

Gordon et al. argue that factories developed as a result of capitalists' strategies to increase output by increasing the size of their work forces. The source of increasing output of factories lay not in "rising productivity per worker," as would be predicted by efficiency theory, but in the "simple expansion of employment" (1982, pp. 81, 84; quotes on p. 81). In other words, capitalists did not increase their output by increasing the productivity of each worker (through the use of laborsaving technology or through greater control over workers), as argued by efficiency theory, but rather by increasing the number of workers. To the extent that capitalists invested in new technologies, these were used to extend existing production techniques rather than to change the production process fundamentally.

These arguments can be tested by estimating a modification of the Cobb-Douglas production function predicting change in output in Indianapolis from 1850 to 1880. The model that we estimate is:

$$V = AL^aK^be^{cT}V_{1850}^e,$$

where  $V$  is the change from 1850 to 1880 in the average value added per firm,  $L$  is the change in average employment per firm,  $K$  is the change in average capitalization per firm,  $T$  is the change in the percentage of firms that were driven by steam or water power, and  $V_{1850}$  is the value added per firm in 1850.<sup>14</sup>

<sup>14</sup> The lagged endogenous variable ( $V_{1850}$ ) is included to control for ceiling and floor effects. Bohnstedt (1969) has shown that models with a lagged endogenous variable yield identical coefficients for other variables when a change variable ( $V$ ) is dependent as when the variable for the most recent time ( $V_{1880}$ ) is dependent. The equation is estimated using generalized least squares (GLS) regression, and autocorrelation is corrected with the Cochrane-Orcutt method (Hanushek and Jackson 1977, p. 173). Because some industries experienced no change or declines in output, labor, capital, or use of power from 1850 to 1880, it is necessary to transform variables before logging them. The transformation is arbitrary (Hanushek and Jackson 1977, p. 100), thus we tried many transformations, all of which yielded essentially the same substantive results. The transformation that we report added three times the standard deviation of each variable to each value of the variable, thus eliminating zero and negative values.

While the proper unit of analysis—the level on which decisions were made about investments in labor and capital—is the firm, it is not possible to follow firms over the 30-year period considered here, given the changing ownership and names of firms and given that most firms in 1880 did not exist in 1850. Thus, the analysis rests on industry-level data. As with the production function in the previous section, to the extent that the sum of the coefficients for labor and capital exceeds one, there are disproportionate outputs for inputs of capital and labor or, put differently, the increased output from 1850 to 1880 results from greater efficiencies or economies in the use of labor and capital.<sup>15</sup>

Table 6 shows the results of this analysis, with entrepreneurial/managerial labor imputed using the two methods discussed above. The larger work forces of firms in 1880 as opposed to 1850 significantly increased output, consistent with Gordon et al.'s (1982, p. 84) expectation. Although Gordon et al. stress the importance of employment expansion in increasing output, the greater investment in capital over this period also significantly increased output. Yet because  $a + b$  does not exceed one, there is no evidence of disproportionate returns to increases in labor and capital—that is, no evidence that increases in output were due to greater efficiency in the use of labor and capital, as efficiency theory expects. Moreover, controlling for changes in size and capital expenditures, the greater use of water- or steam-powered (i.e., factory) technologies over this period did not increase output.

Thus, early capitalists appear to have used an output-maximizing strategy that involved adding more workers and more capital rather than increasing their workers' labor productivity. Of course, this strategy might have been equally effective in both hand-powered manufactories and steam- or water-powered factories and might have led to expansion in work forces and/or capitalization in either of these forms of production. Yet manufactories represented a capitalist strategy to increase output by adding more workers and elaborating the division of labor rather than by expanding capital investment in machinery. Manufactories "assembled large labor forces and reorganized the work before introducing powered machinery or, in some instances, even hand tools" (Laurie and Schmitz 1981, p. 60; Chandler 1977, pp. 53–54). The steam or water

<sup>15</sup> The change in the proportion of men ( $M$ ) is not included in the model since the extended production function that must be estimated if this variable is included (a modification of function estimated in table 5) does not allow estimation of the significance of  $a$ , the coefficient for labor's effect on output, which is necessary to test Gordon et al.'s (1982) arguments. In additional analyses that took into account the differential productivity of men vs. women and children by weighting the labor of women and children from .4–.6 of that of men, we obtained the same qualitative findings.

TABLE 6

COBB-DOUGLAS PRODUCTION FUNCTION ESTIMATES OF CHANGE IN OUTPUT AS A  
FUNCTION OF CHANGE IN LABOR, CAPITAL, AND THE USE OF POWER,  
INDIANAPOLIS, 1850-80

|                            | <i>a</i> | <i>b</i> | <i>a + b</i> | <i>c</i> | <i>e</i> | <i>R</i> <sup>2</sup> | <i>N</i> |
|----------------------------|----------|----------|--------------|----------|----------|-----------------------|----------|
| Model 1 <sup>a</sup> ..... | .283*    | .649*    | .932         | .031     | .188*    | .942                  | 15       |
| Model 2 <sup>b</sup> ..... | .304*    | .627*    | .931         | .033     | .150     | .942                  | 15       |

NOTE.—All monetary variables are expressed in 1850 constant dollars.

<sup>a</sup> With imputed labor of firm owner added.

<sup>b</sup> With imputed entrepreneurial/managerial labor added.

\* *P* < .05.

power available in factories, in contrast, allowed output maximization to occur through the use of *both* larger work forces and greater capital investment in machinery. In 1880, for example, the average factory in Indianapolis had \$52,450 in invested capital, while the average manufactory had only \$5,756. In 1870, when the census included information on machinery, all of the factories, but only 53% of the manufactories, used at least one machine in production. Thus factories may have allowed capitalists to make the greatest investments both in workers and in capital, making this form of production the most conducive to output maximization. Nonetheless, since not all owners of businesses could afford to invest in labor or capital to maximize their output, artisan shops and manufactories, being no less efficient than factories, continued to exist alongside factories in many industries (see table 3). While output maximization throughout the period considered here was the result of incremental increases in labor and capital, Gordon et al. (1982, pp. 84-85) suggest that, by the first decades of the 20th century, output growth had come to be dominated by improvements in technology and new systems of labor control—changes that succeeded in breaking the craft production system in the factory (1982, pp. 84-85).

### Craft Systems of Production and Labor Control

The theories considered here have very different assumptions about the skill, autonomy, and wages of workers in early factories—assumptions that are essential to arguments about efficiency and that help to explain the findings above. Efficiency theory assumes that factories used technological improvements to replace many skilled workers with less skilled ones. This theory expects a deskilling of most factory jobs (machine installers and engineers being an exception) with a concomitant lowering

of average wages. Marglin's (1974, pp. 68–69) arguments on the specialization of labor in factories suggest a similar degrading of skills and lowering of wages.

The craft-production model, in contrast, maintains that because early factories continued to rely on craft systems of production and control, they employed many skilled workers as well as, of course, less skilled assistants, apprentices, and laborers, as did small craft shops of the day. Because skilled workers were vital to the production process in factories, they should have continued to receive good wages relative to skilled workers in artisan shops, even in factories where substantial technological improvements had been introduced. Moreover, because labor in early factories was not being deskilled, there should have been no decline in overall factory wages during the period considered here.

Consistent with the assumption of the craft-production model that work in early factories was not deskilled throughout the period considered here, Indianapolis factories differed little from artisan shops in several important respects. Sokoloff (1984, p. 357–58) suggests that a crude indicator of the division of labor and use of less skilled and inexperienced workers is the percentage of women and children employed. We found above that for all firms in 1870 and 1880, men were more productive workers than women and children, no doubt because of their greater experience and skill. In table 7, we show the percentage of women and children in each of the five work settings in 1850, 1870, and 1880 (a detailed table arranged by industry is available on request). We have not included imputed entrepreneurial/managerial labor in these figures since the theories refer to the skill level of workers in firms, not to that of owners or managers. Factories had roughly the same percentage of women and children as artisan shops in each year, suggesting little tendency for factories to hire less experienced or less skilled workers or to have more specialized divisions of labor. A separate analysis of these data found no tendency for large-scale, capital-intensive factories to disproportionately employ women or children throughout the period considered here, and no tendency for those industries that increased in scale, capital-intensity, or the use of water- or steam-powered technologies over this period to have increased their employment of women and children (Robinson and Wahl 1990).

Table 7 shows the average yearly wages (in constant 1850 dollars) for work settings (a detailed table arranged by industry is available on request). Since the arguments of the theories considered here refer to the deskilling (or not) of workers rather than of owners or salaried managerial personnel, we do not include imputed entrepreneurial/managerial labor or wages in these figures. Contrary to efficiency theory and to control

TABLE 7

AVERAGE YEARLY WAGES AND PERCENTAGE OF WOMEN AND CHILDREN BY WORK SETTING, INDIANAPOLIS, 1850-80

| WORK SETTING            | AVERAGE YEARLY WAGES <sup>a</sup> |      |      | PERCENTAGE OF WOMEN AND CHILDREN |      |      |
|-------------------------|-----------------------------------|------|------|----------------------------------|------|------|
|                         | 1850                              | 1870 | 1880 | 1850 <sup>b</sup>                | 1870 | 1880 |
| Artisan workshop .....  | 288                               | 309  | 286  | 2                                | 10   | 16   |
| Small manufactory ..... | 266                               | 292  | 312  | 9                                | 18   | 19   |
| Large manufactory ..... | 177                               | 373  | 284  | 39                               | 0    | 33   |
| Small factory .....     | 253                               | 349  | 315  | 4                                | 8    | 12   |
| Large factory .....     | 336                               | 335  | 351  | 0                                | 13   | 17   |

NOTE.—Artisan workshop = less than 6 employees, hand power, small manufactory = 6-25 employees, hand power; large manufactory = 26 or more employees, hand power; small factory = 1-25 employees, steam or water power; large factory = 26 or more employees, steam or water power.

<sup>a</sup> In 1850 constant dollars.

<sup>b</sup> Percentage of women and girls in 1850.

theory but consistent with the craft-production theory, the wages of factory workers relative to those in artisan shops did not decline over time.<sup>16</sup> In each of the census years, the wages of factory workers—especially those in large factories—were 10%-25% higher than those in artisan shops, although the differences are not significant. In a related paper, detailed analyses of these wage data, controlling for the proportion of women and children in firms, arrived at the same findings (Robinson and Wahl 1990).

In the 1880 data only, additional information is available on the average daily wages that owners reported for "skilled mechanics"<sup>17</sup> and "ordinary laborers." Although it is the owners, rather than we, who are defining skilled and unskilled work, the distinction is useful because the overall wage figures in table 7 mix skilled and unskilled workers. The skill differentials in wages reported by owners are in accord with those we present below for occupations in specific firms, which suggests that owners were capable of making reasonable distinctions in terms of skill. In table 8, we see that in 1880 the wages of skilled workers were highest in large factories (a detailed table arranged by industry is available on

<sup>16</sup> There is no information on whether workers in the firm were unionized, a factor that might affect wages. Although there were several craft unions in Indianapolis, these were ineffective in increasing wages or in preventing wage cuts throughout the period considered here (Thornbrough 1965, pp. 277, 442, 444; Madison 1986, p. 165). Not until the 1880s were major efforts directed at organizing Indianapolis workers (Madison 1986, p. 165-6).

<sup>17</sup> "Skilled mechanic," in the parlance of the time, was synonymous with "artisan" (Hirsch 1978, p. 7), thus the term had meaning in all work settings.



TABLE 8

HOURS WORKED PER DAY, MONTHS IN FULL-TIME OPERATION PER YEAR AND  
AVERAGE DAILY WAGES FOR SKILLED MECHANICS AND ORDINARY LABORERS BY WORK  
SETTING, INDIANAPOLIS, 1880

| WORK SETTING            | HOURS<br>WORKED | MONTHS IN<br>OPERATION | DAILY WAGES <sup>a</sup> |                      |
|-------------------------|-----------------|------------------------|--------------------------|----------------------|
|                         |                 |                        | Skilled<br>Mechanics     | Ordinary<br>Laborers |
| Artisan workshop .....  | 9.99            | 10.62                  | 1.44                     | .93                  |
| Small manufactory ..... | 9.95            | 9.16                   | 1.81                     | 1.01                 |
| Large manufactory ..... | 9.79            | 10.16                  | 1.83                     | .97                  |
| Small factory .....     | 10.05           | 10.59                  | 1.69                     | .97                  |
| Large factory .....     | 10.07           | 10.45                  | 1.90                     | 1.05                 |

NOTE.—Artisan workshop = less than 6 employees, hand power; small manufactory = 6–25 employees, hand power; large manufactory = 26 or more employees, hand power; small factory = 1–25 employees, steam or water power; large factory = 26 or more employees, steam or water power.

<sup>a</sup> In 1850 constant dollars.

request). Factories and manufactories—both large and small—paid skilled workers significantly higher wages than artisan shops ( $P < .05$ ; see Laurie et al. [1981, p. 100] for a similar finding). There were no significant differences among work settings in the wages of unskilled workers. There is little evidence, therefore, that the wages of factory workers as a whole, or those of skilled factory workers in particular, declined over time as a result of a deskilling of factory labor forces.

While it could be argued that the wages of skilled workers in factories were higher than those in artisan shops because they were being compensated for their less desirable working conditions, other evidence, including that presented above on the division of labor in factories as indicated by their employment of women and children, does not bear this argument out. Table 8 shows that the length of the work day in 1880 was virtually the same in factories as in artisan shops, even though this was not legally mandated. Factories also operated full-time as much of the year as workshops did in 1880, a fact that suggests no higher likelihood of layoffs.

A further sense of the organization of work and wages in early factories can be gained from a separate survey of the “most prominent manufacturers,” conducted by the U.S. Bureau of the Census (1886) in 1880. While returns are extant for only nine Indianapolis firms, the descriptions of the factories in this survey and in hundreds of separate firm histories accord well with the argument that early factories relied on skilled craft workers and that often “production . . . consisted of the agglomerated operations of small shops” (Gordon et al. 1982, p. 86; Clawson 1980, p. 126–49; Nelson 1975, pp. 3–4). Space permits discussion of only a few firms.

The Indianapolis Stove Company, a large, steam-powered operation, lists a foreman and 16 categories of employees, many of which (molders, melters, carpenters, blacksmiths, etc.) are classified as skilled craftworkers in Hershberg and Dockhorn's (1976) detailed classification of occupations for this period. Unskilled occupations included melter's helpers, cleaners, and laborers (U.S. Bureau of the Census 1886, p. 142). A separate firm history reports that "the company . . . was inaugurated in 1850 by Mr. DeLoss Root, who . . . has remained at the head of the house and exercised a controlling interest in its affairs. The foundry proper covers a ground space of 130 × 150 feet embracing the molding and associated departments, the mounting and polishing shops 40 × 60 feet in dimensions. . . . From 80 to 100 skilled and experienced workmen find regular and remunerative employment" (*Manufacturing and Mercantile Resources* 1883, p. 456). The foreman was paid \$83 monthly, skilled craftworkers in the various shops \$1.67 to \$2.50 daily, and laborers \$1.04 daily (U.S. Bureau of the Census 1886, p. 142).

The Western Furniture Company, a steam-powered factory with 80 employees, lists four categories of employees, two of which—cabinetmakers (\$1.25–\$1.67) and varnishers (\$1.10–\$1.38) are listed as skilled in Hershberg and Dockhorn's (1976) classification. Machine hands (\$1.25–\$1.67) are not classified by Hershberg and Dockhorn, but may well have been skilled since, as Laurie and Schmitz (1981, p. 57) point out, in many factory operations involving machines at this time, the worker guided the machine rather than the reverse. Unskilled laborers earned \$.83–\$1.04 daily. The return notes that cabinetmakers were expected to furnish their own tools (U.S. Bureau of the Census 1886, p. 442), as was the expectation in craft shops of the day. Cabinetmakers' wages relative to those of laborers had remained virtually unchanged since the company's founding in 1868, despite the introduction of technological improvements (the firm's capitalization increased from \$9,810 to \$39,984 during the 1870s).

The survey of wages included one textile mill. C. E. Geisendorff and Company, one of the city's oldest factories, was a steam-powered woolen mill with 45 employees in 1880. Nineteen occupations are listed, in addition to the "overseers of various departments," who received \$49 to \$65 each month. Occupations ranged from skilled carders (\$2.71 a day), finishers (\$1.67), and dyers (\$1.67), to unskilled laborers (\$1.04) and helpers, like girl spoolers (42¢ a day), boy carders (50¢), and boy pickers (62¢) (U.S. Bureau of the Census 1886, p. 386). Despite sizable investments in mechanical improvements (capitalization had increased from \$5,000 in 1850 to \$93,442 in 1880), the wages of skilled employees relative to unskilled actually increased slightly from 1850 to 1880. It appears that even in textile mills, where technical improvements were fairly common,

skilled workers were important to the production process and were well rewarded relative to unskilled workers.

While there is no way of telling how many factories in Indianapolis relied on the inside contracting system, since few firm histories would have been likely to mention this (Clawson 1980, p. 75), the Kimberlin Manufacturing Company, an agricultural implement maker, is described as follows: "Ten hands are regularly employed in 'setting up' the various styles of machinery, the iron and wood work of which is all manufactured by other parties under contracts, the company thereby furnishing employment . . . to a large number of skilled operatives" (*Manufacturing and Mercantile Resources* 1883, p. 426).

Descriptions of factories in the Indianapolis firm histories for the early 1880s often mention multiple shops, situated in separate rooms or on different floors, usually supervised by foremen, and operated by "skilled and experienced workmen," "skilled mechanics," or "skilled artisans," rather than by "unskilled workmen," girls, or boys.<sup>18</sup> The following excerpt is from the description of the Western Machine Works: "The business is conducted throughout with the most perfect system, a force of about 200 skilled mechanics being employed in the various departments, each of which is under the immediate supervision of experienced practical superintendents. . . . The subdivisions . . . may be enumerated as follows: The main machine shop, boiler shop, foundry, pattern rooms, carpenter shop, sheet iron department, blacksmith shop, pipe room, bolt room, buhr room, governor room, paint shop. . . . The various departments . . . are under the immediate supervision of the efficient officers [president and secretary] above named (*Manufacturing and Mercantile Resources* 1883, p. 407).

The wage survey and firm histories also suggest that the labor control systems of early factories were derived from those used in craft production. Some factories used foremen to supervise workers and others used inside contractors. Yet in the several hundred descriptions of firms that exist for the city in the early 1880s (*Manufacturing and Mercantile Re-*

<sup>18</sup> So common was the division of factories into separate shops that the Census Bureau gave the following example of how discrepancies arose between the numbers of certain occupations listed in the manufacturing and population censuses:

A large establishment producing agricultural implements is really divided into a number of shops or factories, where perfectly distinct trades are carried on. There is the foundry, where the iron parts of the machine are cast, and the men working herein will report their occupations as that of foundrymen. There are carpenters' shops, where the wooden parts are made and shaped by carpenters, who call themselves by that term, and no other. There are also machine shops, paint shops, etc., where the artisans employed know themselves as machinists or mechanics, or as painters and varnishers, and not as makers of agricultural implements. [U.S. Bureau of the Census 1883, p. 710]

*sources* 1883), which probably tend to be biased toward the inclusion of the larger, more established firms, none suggested greater hierarchical differentiation than one or (occasionally) two levels (the owner, president, or general manager) above the foremen or contractors and one or two levels (workers and assistants or helpers) below. Moreover, the overwhelming majority of factories were small enough for the owner to supervise the foremen personally and know all the workers, something that Edwards (1979, p. 26) suggests is possible in firms with as many as 200 or 300 employees. As in the nation's second largest city, Philadelphia (Laurie and Schmitz 1981, p. 66), most firms in Indianapolis were quite small throughout this period. No Indianapolis factory had more than 100 employees in 1850, six exceeded that size in 1870, and 15 in 1880. Even in 1880 only seven factories exceeded 200 workers, and the largest had 600 workers. Thus, it is unlikely that many factories had developed systems of labor control much beyond the "simple" control of direct supervision by the owner and a few foremen (Edwards 1979, p. 26), and many of the firm descriptions emphasize the owner's personal involvement in the operation of the company. A few factories, especially those using inside contractors, may have used "hierarchical" control—in which the owner was less immediately present—and contractors or foremen—almost invariably skilled workers who had risen from the ranks of workers—exercised the personal control over workers that owners did under simple control. Yet it is unlikely that any Indianapolis factories at this time went beyond these control systems derived from craft production to introduce bureaucratic control in the form of detailed work rules, promotion procedures, wage scales, job descriptions, and so on—a form of labor control that Edwards (1979, p. 131) argues developed in the post-1945 period.

## DISCUSSION AND CONCLUSIONS

In our analysis of the rise of early factories in Indianapolis, we found little support for efficiency theory. In a highly competitive manufacturing environment that should have been ideal for the encouragement of improvements in efficiency, we found that firms with large numbers of workers and large investments in capital had no efficiency advantage over firms with small work forces and limited capital investments. There were no economies of scale in any industry in 1850, 1870, or 1880. Nor did the introduction of water- or steam-powered technologies—the defining characteristic of factories—result in greater output, when we controlled for size and capitalization, in any of the three census years. Only among intermediate-sized, hand-powered firms in 1870 were there significant returns to scale, and there were no scale economies among such

firms in either 1850 or 1880. Moreover, in our analyses of the wages and working conditions of Indianapolis workers, there was no evidence of the deskilling of workers in factories that the efficiency model assumes.

Some efficiency arguments about factories refer to efficiency arising from their bureaucratization (e.g., Blau 1956, p. 19). Marglin's (1974) social control theory also assumes that early factories adopted systems of social control (hierarchical structures and specialization of labor) that made them more efficient than craft production. Our analyses of qualitative materials on firms in Indianapolis suggest that early factories were not bureaucratized, had limited hierarchical structures at best, and were often organized as a series of craft shops that may have replicated authority relations within artisan shops. Thus, there could have been little greater efficiency of factories over small shops on the basis of their superior labor control systems or "bureaucratic" structure. Where management did make serious attempts to regulate the pace of work, factory workers—especially those used to the "Blue Mondays" and on-and-off schedules of artisan shops—may have resisted such efforts by setting informal production quotas of their own, holding output per worker to roughly the same levels as in craft shops (Clawson 1980, pp. 126, 149; Montgomery 1979, pp. 10–14). The efficiency of early factories undoubtedly suffered due to the failure of capitalists to solve the problem of labor control.

Our findings are generally consistent with the other alternatives to efficiency theory. Although limitations of our data did not allow us to test the arguments of the industrial geography perspective, which states that the development of factories involved a highly complex interweave of social and economic factors, our findings do lend support to the assumption that the rise of factories had little to do with advantages in efficiency or social control over competing forms of production. Case studies of the development of particular factories or of the growth or decline of particular industries in Indianapolis might well reveal the complexities in industrial development and difficulties in generalizing across cases that writers in this perspective have noted (Scranton 1989, p. 502).

Our findings are most consistent with the craft-production model, which assumes that early factories were no more efficient than small-scale artisan production because they continued to rely on craft-production methods and failed to use technology to transform the production process fundamentally (Gordon et al. 1982, pp. 79, 81; Clawson 1980; Nelson 1975, pp. 3–4). Analyses of the manufacturing censuses, an 1880 wage survey, and contemporary firm descriptions suggest that there were skilled workers in nearly all factories, that some were expected to provide and maintain their own tools, that they were well paid relative to apprentices, assistants, helpers, and laborers, and that over this period their

wages did not decline relative to those of workers in artisan shops despite the introduction of new technology. The small size of early factories, their limited hierarchical structures, and their frequent division into small shops suggest that the systems of labor control used by early factories grew out of the craft organization of production. Given their craft organization, one would not expect early factories to be more efficient than artisan shops.

The craft-production model also helps answer the question of why employment and capital investment in factories continued to expand in Indianapolis throughout this period (by 470% and 813%, respectively, on average) even though economies of scale were not realized. We found (in table 6) that adding more workers and more capital did lead to greater output and, presumably, greater gross profit.<sup>19</sup> Dawley (1976, pp. 28, 74) points out that "so many hands, so much money" was the business wisdom of the prefactory era. Our analyses suggest the persistence of this business calculus well into the factory era. It was a strategy based not on returns per unit of investment (e.g., greater output or profit per worker) but on gross amounts of output and profit. Since hand production and factory production were equally efficient, owners wanting to increase their gross amounts of output and profit had little choice but to increase employment and/or capital investment. The owners of hand-powered manufactories concentrated on expanding output by adding more workers rather than by adding machinery. Steam- or water-powered factories afforded owners the best setting in which to increase both their work forces and capital investments in machinery as an output-maximizing strategy. As Gordon et al. (1982) suggest, the dramatic gains in factory employment and capitalization during the second half of the 19th century may have been the outcome of this output-maximizing strategy.

Yet this strategy had almost certainly begun to reach the point of diminishing returns by 1880, as skilled workers in large factories were able to press for higher wages than their counterparts in small artisan shops (see table 7; Laurie et al. 1981, p. 100), meaning that even though the factory's gross profit increased as its work force increased, its *rate* of profit must have declined. In the 1880s and 1890s, businessmen, economists, and politicians complained bitterly that owners' share of output was declining relative to their workers' share (Livingston 1987, p. 79). By the late 19th century, factory owners were confronted with skilled craftworkers who continued to be more knowledgeable than they and who still exercised a great deal of control over the pace and content of

<sup>19</sup> Our data do not allow estimation of profits since we have no information on the miscellaneous costs (including expenditures for maintenance, insurance, rent, contract work, taxes) that would need to be taken into account.

production, as well as with an emerging labor movement that resisted pay cuts and efforts to increase the length of the workday. At the same time, the railroad system expanded product markets from a local to a regional and even national scale, intensifying the competition among the largest factories and making it necessary for them to extract more output from their workers (Gordon et al. 1982, p. 95; Montgomery 1979, pp. 9–11; Livingston 1987, p. 79). Capitalists found the solutions to their problems in new machinery that could be operated by low-paid, unskilled labor and in new systems of labor control (e.g., closer supervision, job analysis through time and motion studies, payment by the piece, record keeping on rates of productivity, and “scientific management”)—methods that by the first decades of the 20th century “typically eliminated skilled workers, reduced required skills to the barest minimum, provided more and more regulation over the pace of production, and generated a spreading homogeneity in the work tasks and working conditions of industrial employees” (Gordon et al. 1982, p. 113; Clawson 1980, pp. 167–99; Nelson 1975; Edwards 1979).

But all this would come later than the period considered here. As we have seen in the case of Indianapolis, great gains in factory employment occurred well before this, at a time when factory owners still relied heavily on craft traditions, and when they had not yet developed systems for integrating labor and capital into a more efficient whole.

## APPENDIX

TABLE A1  
CHARACTERISTICS OF SELECTED MIDDLE-SIZED CITIES, 1880

| Characteristic         | Indianapolis,<br>Indiana | Lynn,<br>Massachusetts | Syracuse,<br>New York | Reading,<br>Pennsylvania |
|------------------------|--------------------------|------------------------|-----------------------|--------------------------|
| No. of firms .....     | 688                      | 343                    | 724                   | 330                      |
| No. of employees ..... | 10,000                   | 12,420                 | 10,966                | 6,695                    |
| Wages (\$) .....       | 3,263,956                | 4,859,596              | 2,534,182             | 1,866,162                |
| Capital (\$) .....     | 8,371,234                | 4,910,181              | 6,819,619             | 6,246,047                |
| Value added (\$) ..... | 6,876,404                | 7,825,675              | 5,123,981             | 4,043,536                |

SOURCE.—Published tables of the Census of Manufactures for 1880 (U.S. Bureau of the Census 1887).

NOTE.—For comparability with the analyses in text, all monetary values are in constant 1850 dollars.

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# Getting Ahead in Urban China<sup>1</sup>

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This article argues that structural segmentation is a universal phenomenon in all complex societies and across political economies. Each political economy uses specific criteria in delineating segments of its economic and work organizations. Furthermore, it is argued that segmentation identification constitutes a critical destination status for individuals engaged in the status-attainment process. A representative sample of the working population in Tianjin, China, is analyzed to show that entrance into the core sectors (state agencies and enterprises), rather than the job per se, constitutes the primary goal of status attainment. Entering into a more desirable work-unit sector in China takes on differential significance and process for males and females. For males, the direct effect of intergenerational factors (i.e., the effect of father's work-unit sector) is evident. For females, such an effect is only indirect; instead, to a great extent, their status attainment depends directly on their own educational attainment. Also, upward occupational mobility across sectors (from the peripheral to the core) between first and current jobs is substantially greater among male workers (over 60%) than among female workers (20%). Likewise, males benefit more from social resources (the use of social contacts and their resources) in the job search than females. These findings shed light on the significance of political economy in defining statuses and the viability of the industrialization-attainment thesis. They also point to other operating processes that transcend the effects of political economy or industrialization. Specifically, these explanatory schemes do not yet prove adequate in accounting for gender differences and the use of social resources in the status-attainment process.

## INTRODUCTION

The study of social stratification and social mobility has benefited greatly from the conceptual and empirical developments concerned with segmentation in society. Conceptually, it has been shown that in a market econ-

<sup>1</sup> Data for the paper were drawn from a collaborative study by the first author, the Tianjin Academy of Social Sciences, and the municipal government of Tianjin. We

omy, firms competing for advantageous positions attempt to maximize concentration, capital intensity, state-sponsored production, size, and economic scale (Kalleberg, Wallace, and Althauser 1981; Hodson and Kaufman 1982). Advantaged firms show distinctive features in recruitment, internal labor markets, and reward structures (Wallace and Kalleberg 1981; Althauser and Kalleberg 1981; Baron and Bielby 1984), which, in turn, attract the best qualified laborers, which further strengthens these firms' relative advantages in the market (Edwards 1975; Gordon, Edwards, and Reich 1982). Empirically, segmentation theory has led to fruitful examinations of the segmented labor market, the dynamics of the internal labor markets, and differential reward systems (Bibb and Form 1977; Beck, Horan, and Tolbert 1978; Baron and Bielby 1980; Kalleberg, Wallace, and Althauser 1981; Hodson 1983).

Interestingly, the development of the segmentation theory and the research on it have been closely identified with the market economy or the capitalist society. Both conceptual arguments and empirical attention have focused on the societies in North America, Western Europe, and other capitalist states such as Japan (see Kalleberg [1988] for a review). To many, the development has even been seen as an extension of the Marxist or neo-Marxist conceptualization with the intent of establishing a theory of capitalist development (Gordon et al. 1982; Nolan and Edwards 1984). The implication is, therefore, that segmentation is a conceptualization and phenomenon associated primarily, if not solely, with the capitalist society and its associated market economy.

We argue that segmentation is a universal phenomenon associated with all complex societies and all political economies. It is true that each political economy evokes a set of criteria that produces the development of a particular segmentation structure. In the market economy, free competition compels firms to make certain choices in order to maximize their advantages and their relative dominant positions in the market (Edwards 1975; Gordon et al. 1982). While such market competitiveness may not exist in a nonmarket economy, that does not imply that segmentation either does not or need not exist. On the contrary, another political econ-

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omy may well exercise another set of choices and promote segmentation of its economic and labor structures in order to maximize its internal and external advantages (for different but compatible analyses, see Burawoy and Lukacs 1985; Stark 1986). If this argument is valid, then one should expect to find segmentation in every complex society. The issue becomes not whether segmentation exists, but, rather, what criteria a political economy chooses in implementing it.

Take the state socialist societies as the alternative political economy. Rather than arguing that because these societies lack market economies segmentation would not exist in them, it would be more fruitful to examine how such societies are segmented and what consequences such segmentation has for the labor market.

We argue that, in a state socialist society, social organizations are conceived and structured so as to maximize the centralized process relative to allocation, production, and distribution of labor, material, and financial resources. Therefore, institutions and enterprises of certain industries and administrative functions are given priorities in allocation of labor, material, and financial resources, elaboration and size of the structure, differential rewards, closeness to the central planning process, and power over other parts of the society (Domanski 1988). These priorities form the basis for segmentation of social organizations in the society. A most explicit implementation of this segmentation, for example, is the degree to which the central government exercises direct control of a particular organization. High-priority organizations are "owned" by the state, while low-priority organizations tend to be decentralized as collectives sponsored by local governments or communities (Whyte and Parish 1984; Walder 1986; Bian 1990).

Furthermore, such segmentation not only dictates interorganizational dynamics, but also has profound implications for individual workers (Szelenyi 1978; Domanski 1988). It offers a differential opportunity structure for rewards such as promotion opportunities, financial benefits, quality of housing, quality of schooling for children, and so forth. More important, it confers unequal socioeconomic status on workers. Social mobility becomes a matter not of getting a better job or making more money (although such consequences may well follow) but rather of getting into the right work units—work units in the advantaged sectors.

If this argument is valid, study of social mobility, especially of the process of status attainment, across political economies must similarly redirect its focus to segments of the labor structure as well as to occupations or wages. For example, Tremain's (1970) thesis that the criteria of status attainment tend to shift from ascribed factors to achieved ones as a society becomes more industrialized needs to be examined relative to the work-unit status as well as to the occupational status and earnings

of an individual. Yet, so far, the research program concerned with the industrialization-attainment thesis has mainly focused on occupation and income, excluding status criteria associated with segmentation identification or those criteria meaningful in political economies other than the capitalist state. Proper segmentation identification for each type of political economy and its inclusion as status criterion may, to a large degree, help resolve controversies in this literature.

A case in point is the study of the status-attainment process in China, a state socialist society. Since the mid-1970s, several large-scale survey studies have been conducted on status attainment in China. The major finding is that parental status does not directly affect one's own occupational status. Rather, its effect is mediated through education. For example, Parish (1984) and Whyte and Parish (1984), using informant data collected in the mid-1970s, found that effects of parental status on a child's educational and occupational attainment have been waning since 1966. More recent studies conducted in Beijing (Xie and Lin 1986) and Tianjin (Blau and Ruan 1989; Lin and Bian 1990) have further confirmed that parental status had no direct effect on the attained status of both first and current jobs. These data seem consistent with the findings conducted in Eastern Europe. Data from Hungary and Poland also show little direct effect of parental status on occupational attainment (Meyer, Tuma, and Zagorski 1979; Zagorski 1984; Treiman and Yip 1989).

According to the industrialization-attainment thesis, these findings can be interpreted as suggesting that these state socialist societies, having attained a certain level of industrialization, show a reducing effect of ascription. However, data from the United States (Blau and Duncan 1967; Duncan, Featherman, and Duncan 1972) and other industrialized countries (Treiman and Yip 1989) show that the direct effects of parental status on one's own job status (both first and current jobs) are at least as strong, and perhaps stronger compared with those found in China, Hungary, and Poland. The industrialization-attainment thesis would certainly have anticipated a somewhat different pattern; that is, the parental status effects should be somewhat stronger in China, Hungary, and Poland than in the United States.

An alternative explanation for the waning effect of parental status in China was offered by Parish (1984) and Whyte and Parish (1984). They suggested that, since 1949, the Chinese society has undergone a transformation in which intergenerational inheritance of status has been significantly reduced. Thus, the reduction of the parental status effect is seen as a consequence of political economy and its policies rather than as derived from the industrialization process.

We argue that the resolution of this controversy depends, first of all, on identifying the status criteria meaningful to each society. Once the status criteria are identified, it would then be possible to assess appropriately the relative contributions of ascribed and achieved characteristics and to shed light on the relative merits of the industrialization and the political economy arguments.

The contention here is that for the Chinese society, the status-attainment process should be more focused on attainment in the "right" work units than on attainment in occupational status. Locations in the segmented labor structure confer relative status and become appropriate "destinations" of status attainment. In the following section, we will explain why the work unit takes on such significance and why status attainment in China is more geared to work units than to occupations per se. Then, we will test models of status attainment containing both occupation and work-unit sector as status criteria to (1) examine the relative merits of these status criteria, and (2) ascertain the relative contributions of ascribed and achieved characteristics to these criteria.

#### SIGNIFICANCE OF WORK-UNIT SECTORS IN STATUS ATTAINMENT IN CHINA

##### Private, Collective, and State Sectors

For China, allocation and distribution of resources and their effects on the workers are differentiated between state and collective sectors (Whyte 1984). In general, the ownership of most social organizations and industries is divided into four major groupings: (1) the private sector, (2) the collective sector, (3) state enterprises, and (4) state institutes and agencies.

The private sector is made up of self-employed laborers and family-based enterprises (i.e., bicycle repairers, carpenters, barbers, and small restaurants). It was practically eliminated during late 1960s and early 1970s but has reemerged following the Cultural Revolution. The number and sizes of private enterprises, while increasing significantly in the 1980s, especially in the rural areas, remain small. By 1987, about 4% of the labor force in cities and towns were employed in the private sector (State Statistical Bureau of China 1988, p. 123).

The remaining labor force is employed in either state enterprises and institutes/agencies (about 70% of the labor force in 1987) or the collectives (about 25% of the labor force in 1987). Generally, the state takes control of all major and vital agencies, institutions, and enterprises, while the remaining units are collectives under the jurisdiction of city, district, and town governments. The state work units, because they are owned by all the people (*quan-min suo-you*) and are chiefly responsible for the well-

being of all the people and the nation, claim priority in resource allocations. The material, financial, and labor needs of the state work units greater resources and benefits, for both the work units themselves and their workers, than the collectives, but also exercise much control over resource allocations for collective enterprises. The state employees receive benefits that are substantially higher and more extensive in both quantity and quality than those available to their counterparts in the collectives. Such benefits extend to the families of the workers in terms of better housing, better schools, and better services (access to groceries, hospitals, bathhouse privileges, and top-brand appliances) and pensions (Whyte and Parish 1984; Walder 1986; Davis 1988).

The state agencies and institutes (to be referred to as state agencies from this point on), employing almost exclusively white-collar (mental labor) workers (along with a minor service and custodian staff) administer, manage, and conduct office and research work, whereas the state enterprises, employing a mixture of white-collar and blue-collar (manual labor) workers, are mainly engaged in manufacturing. The collectives, on the other hand, employ primarily blue-collar workers with a relatively small administrative staff and engage in smaller scale manufacturing and services (Whyte 1984).

### Labor Allocation

This stratification differentiation also applies to labor-allocation practices. Two distinguishing features can be identified. First, new laborers are assigned to work units instead of to jobs. Second, the state-sector work units are given priority over the collectives in labor allocations (Whyte and Parish 1984; Walder 1986; Bian 1990).

The labor-allocation process begins at the central government agency, the National Planning Commission, which sets up principles of recruitment for all work units. Furthermore, in consultation with various industries and ministries and with a projection of worker needs, the Commission identifies annual quotas for all state agencies, institutes, and enterprises. The state work units are given priority in the assignment of new workers. Then, the planning commissions at local levels (provinces, cities, and towns), using the same consultative procedures, identify quotas for all regional and local agencies, institutes, and enterprises. The local labor bureaus use these guidelines to assign the required numbers of workers for each unit to subdistrict offices and schools. Eligible youths and school graduates are screened, evaluated, and assigned by the screening committees in the subdistricts and schools, which submit specific recommendations to the labor bureaus. The bureaus then formally notify



each youth of his or her assigned work unit.<sup>2</sup> The assignment process matches the recruiting work unit and the new worker. Little attention is given to the specificity of the job to the worker.<sup>3</sup>

State work units are given priority in this labor-allocation process in two ways. First, when quotas at the national and local levels are set up, labor demands from the state work units are worked into the plans first. Second, when eligible laborers are matched with work units, attention is always given first to the allocations available in the state work units.

These structural properties and relationships strongly indicate that the relationship of the state work units and the remaining units in the collectives and the private sector is one of core to periphery. Individuals are identified with their work units. Such identification lends differential status to the individual workers, not only in terms of visible benefits such as wages, bonuses, housing, nurseries and schools, medical care, and even bathhouses, but also, and just as important, access to social, economic, and political services (e.g., sports and cultural events, trains, flights, and hotels, better quality food and goods, etc.; see Whyte and Parish 1984; Walder 1986).

In contrast, the distribution of resources and rewards relative to occupations are much less differentiated. In most cases, rewards and benefits to workers are graded according to seniority, and, to a lesser extent, work and political performances, rather than occupations (Korzec and Whyte 1975). Such distributional and recruitment characteristics further reinforce status identification, primarily, with work-unit sector, and, secondarily, with occupation.

#### FORMULATION OF RESEARCH HYPOTHESES

Now that we have established that work-unit sector is a significant status criterion, we can reformulate for examination the controversy we discussed earlier. That is, the issue becomes one of assessing how the introduction of the work-unit sector as a status criterion affects the analysis of intergenerational transmission of status relative to work-unit sector. The controversy can be respecified as two alternative hypotheses. If the industrialization-attainment thesis is credible—and because China is a

<sup>2</sup> Since 1988, a new policy has been implemented whereby college and vocational school graduates can either wait for assignments, as they previously did, or seek out work units. In the latter case, when a satisfactory match is obtained by both sides, the work unit informs the labor bureau, which then formally approves the employment.

<sup>3</sup> Again, some attention is given to job assignments to college and technical school graduates.

developing country—data should show that parental characteristics retain some direct effect on one's entering and moving into the core (state) work units. In particular, status of father's work unit should exert a direct effect on the status of one's first work unit. On the other hand, if the political economy argument is credible—and because China is a state socialist society—the data should show that such direct parental influence is minimal.

An earlier study has explored the significance of work-unit sector in status attainment in China. In 1983, a study was conducted in Beijing with a representative sample ( $N = 1,774$ ) of the employed adults (Xie and Lin 1986). This study replicated the Blau-Duncan model in which the effects of parental characteristics and education on occupational status were assessed. The study also examined the sector in which jobs were located. The state agencies and enterprises were found to offer many benefits and securities unmatched by the collectives and the small private sector. They also provided greater opportunity for internal mobility.

While the Xie-Lin study provided some evidence that the work-unit sector was an important variable as a measure of current occupational status, it did not gather data for father's work-unit sector or the work-unit sector of the first job. Thus, it was impossible to examine the relative merit of status inheritance.

In the remainder of the article, we will use recent empirical data from an urban area in China to examine the specified hypothesis. In order to demonstrate the value of work-unit sector as a status, the examination will incorporate work-unit sector along with occupation as an indicator of status destination.<sup>4</sup>

In addition, the analysis will be conducted separately for males and females. Past research (Andors 1983; Whyte 1984; Honig and Hershatter 1988) showed that Chinese women remain burdened with household and family. Furthermore, while they have largely participated in the labor force, women, as compared with men, tend to concentrate on certain

<sup>4</sup> Income constitutes yet another important status indicator. Presently, income differences for the majority of the Chinese work force are relatively small (Parish 1984; Whyte and Parish 1984) and may, in fact, be decreasing in urban areas (Walder 1990). Sensational reports of a few rich peasants and entrepreneurs aside, the overwhelming majority of urban workers in China draw regular salaries and bonuses from their work units. The latest estimate from Tianjin, for example, was that in 1988 only 1.8% of the work force were in the private sector. A significant portion of these workers are transients from neighboring rural areas. If the current tightening policy on the private sector, an aftermath of the Tiananmen Incident, persists for a period of time, the development of the private sector and, therefore, income differentiation will be further delayed.

jobs, work units, and industries, receive fewer wage increases, and are less likely to become party members. For the present study, it is important to explore the extent to which status attainment relative to work-unit sector as well as to occupation differs between males and females.

#### THE STUDY DESIGN AND MEASURES

The survey was conducted in the urbanized area of Tianjin, China, in November 1985. A stratified random-sampling procedure was used to obtain 1,000 employed adults in the urbanized districts of Tianjin.<sup>5</sup> The respondents sampled are, on the whole, quite representative of the adult population in the urbanized area, as defined by the census.

Since our focus here is on the status-attainment process, this study will only incorporate those respondents within the standard employment age ranges. In China, men generally retire when they are 65 (white-collar workers) or 60 (blue-collar workers) years old and women when they are 55 or 50. However, much flexibility is involved. Depending on the needs of units, individuals may be retained beyond the official retirement ages. Also, individuals may be able to continue work in another work unit. Thus, the study includes only the currently employed men of 65 years or younger and women of 60 years or younger. The sampled respondents within these ranges consist of 87.1% of the total sample. The characteristics of the 469 men and 402 women in the study group were similar to those for the total sample, with the sole exception of the average earnings. The mean earnings of respondents in the study sample is somewhat lower than that of the total sample (75.20 yuan vs. 86.55 yuan). The difference is due to the exclusion from the study sample of retired workers whose pensions were significantly higher than the average wage of those currently employed.

Our measurement for education consists of the following categories: (1) no schooling, (2) elementary school, (3) junior high, (4) senior high, (5) up to three years of college, and (6) four or more years of college. It is assumed to be an ordinal scale.

Assessment of the occupational prestige for father's job and the respondent's first job presents some problems. The prestige equation (Lin and Xie 1988) used to calculate such scores requires information on education and income. An effort was made to standardize incomes, so that such scores could be computed. However, it was impossible to estimate stan-

<sup>5</sup> Detailed description of the sampling procedure and the sample representativeness of the population can be obtained from the authors upon request.

dardized incomes prior to 1949, since, with the establishment of the present regime, price and wage information from previous decades that was relative to the 1949 standards was not available. Thus, the occupation variables (for the father's and the respondent's first and current jobs) were measured with the classifications: (1) farming, (2) sales, (3) manufacturing and transportation, (4) service, (5) office work, (6) administrative and managerial, and (7) professional and technical. The rank ordering of these categories was validated by examining their prestige scores for the current jobs. The higher the value, the higher the occupational status.<sup>6</sup>

Ownership of the work unit is used as a measure of the work-unit sector. We identified four segments: (1) private or family enterprise, (2) collective enterprise, (3) state enterprise, and (4) state agencies. The higher the value, the higher the presumed sector status.

It is important to validate differences between the major sectors. A cross tabulation, presented in table 1, shows that, in general, respondents in the state sectors consistently showed higher education, job occupation and prestige, and personal earnings. Thus, the data confirmed and validated the characterization of the state work units as the core sector and the collectives as the peripheral sector in the research literature (Whyte and Parish 1984, pp. 25–26, 30–33; Walder 1986, pp. 39–48).

## MODELS

The initial model we use to assess the status-attainment process in Tianjin, China, is the basic Blau-Duncan model, in which the ultimate exogenous variables are father's socioeconomic characteristics (education and occupation) and the intervening variable is the attained education.

In the causal sequence, work-unit sector precedes occupational status. This proposition is stated in probabilistic rather than deterministic terms. Since the core sectors contain more white-collar jobs, entering a core sector increases the likelihood that an individual will attain a "better" occupation. The reverse cannot be true (that finding a better occupation increases one's likelihood of entering into a core sector).<sup>7</sup> The alternative strategy is to consider both sector status and occupational status as indi-

<sup>6</sup> Also eliminated from further analysis are military jobs (mostly as first jobs) and "other" jobs, which tend to be jobs acquired before 1949. It is difficult to place them in the rank ordering and there were few of them.

<sup>7</sup> The only exception is professionals who are likely to find themselves in the state-agency sector.

TABLE 1  
CHARACTERISTICS BY WORK-UNIT SECTOR FOR RESPONDENTS' CURRENT JOBS

| CHARACTERISTIC        | STATE AGENCY |        | STATE ENTERPRISE |        | COLLECTIVE ENTERPRISE |        | PRIVATE AND FAMILY ENTERPRISES |        |
|-----------------------|--------------|--------|------------------|--------|-----------------------|--------|--------------------------------|--------|
|                       | Male         | Female | Male             | Female | Male                  | Female | Male                           | Female |
| Education*            | 4.0          | 3.8    | 3.1              | 3.0    | 2.9                   | 2.6    | 2.0                            | 2.0    |
| Nonmanual (%)         | 80.0         | 77.0   | 23.0             | 21.0   | 22.8                  | 15.4   | .0                             | .0     |
| Prestige score        | 75.6         | 69.2   | 58.9             | 53.8   | 54.1                  | 44.6   | 49.8                           | 33.0   |
| Monthly salary (yuan) | 96.0         | 81.2   | 78.0             | 64.4   | 70.4                  | 52.8   | 104.0                          | 40.0   |
| Monthly bonus (yuan)  | 6.3          | 3.6    | 13.1             | 9.0    | 8.3                   | 7.1    | 5.0                            | .0     |
| Party member (%)      | 32.6         | 22.2   | 16.7             | 8.3    | 19.3                  | 6.8    | .0                             | .0     |
| N's                   | 95           | 81     | 310              | 194    | 57                    | 117    | 1                              | 2      |

NOTE.—Except for sample size, all entries are means.

\* Education: 1 = no schooling, 2 = elementary school, 3 = junior high, 4 = senior high, 5 = up to three years of college, and 6 = four or more years of college.

cators of work status. Subsequent examination of this alternative found less consistency with the data.<sup>8</sup>

Party membership, another significant factor, will also be examined. In China, joining the Communist party customarily takes place following entrance into a work unit. Relatively few candidates are admitted into the party. It is usually a reward for personal loyalty to the ideology as well as for work achievements. Thus, in that context, it can be considered as a measure of achieved status. Once such a status is acquired, it then becomes a resource for further mobility—especially for moving from a worker status to a cadre status and from a regular cadre status to a decision-making cadre status—both within and, less frequently, across work units. Thus, in the process of status attainment, party membership holds a position somewhat similar to educational attainment in the United States. That is, it acts as both an endogenous variable (attainment variable) and an exogenous variable (resource variable). It is incorporated as an intervening variable, which places it between the first- and current-job measures in the causal status-attainment process. We will analyze factors leading to party membership to ascertain whether achieved or ascribed status is more likely to influence one's obtaining party membership. Then, we will examine the role of party membership in subsequent status attainments.

Age will be controlled for in all models. Age is considered an indicator of seniority and also reflects cohorts. While these subjects are not of central concern here, age has been known to affect education and work-unit sectors and occupational statuses of the first and current jobs. Thus, relative contributions of the key variables in the status-attainment process will be assessed with age being taken into account.

Throughout this article, comparisons will be made, where appropriate, between this study and several other studies. These are: (1) the Blau-Duncan data from American males (1967), (2) the Albany study of males (Lin, Ensel, and Vaughn 1981), (3) the New York State study of males and females (Ensel 1979), (4) the Whyte-Parish neighbors study (Whyte and Parish 1984), (5) the Beijing study of Chinese males and females (Xie and Lin 1986), and (6) the Blau-Ruan study in Tianjin (1989). None of

<sup>8</sup> The alternative conceptualization of two indicators and a single concept was put to test in a structural equation model in which a latent variable, work status, was constructed for father's first job and current job, each with two indicators; sector status and occupational status. The results show that such a model did not fit well with the data ( $\chi^2 = 293$ ,  $df = 19$  for males and  $\chi^2 = 219$  for females; the adjusted goodness-of-fit index was .71 for males and .77 for females). Even when the error terms of each pair of indicators were correlated, the fit did not show significant improvement. Thus, we conclude that such an alternative conceptual formulation has received little support from our data.

these studies contain all the variables examined here; each, however, has certain important features. The Blau-Duncan study is considered the basic American data set for males in the 1950–60 period. The Albany study was a study of status attainment for males in an American urban community. The New York State study contains measures for status attainment of both males and females. The Whyte-Parish data were the earliest systematic study of status attainment in China and they, for the 1972–78 period, provide a critical reference to a period when the stratification and mobility processes underwent changes. The Beijing study of 1983 used the basic Blau-Duncan model variables as well as party membership and sector information pertaining to current job for both males and females. The Blau-Ruan study was conducted two years later, in Tianjin, the same city as the present study. They offer an opportunity to validate part of the results.

Zero-order correlations among the variables are presented in the Appendix table A1 for males and females separately. To assess the status-attainment data, we conduct a series of equations for several endogenous variables. The endogenous variables, in causal sequence, are: education ( $E$ ), first-job sector ( $U_W$ ) and occupation ( $O_W$ ), party membership ( $P$ ), and current-job sector ( $U_Y$ ) and occupation ( $O_Y$ ). In order to make comparisons with results from the United States, we construct separate estimation equations, wherever appropriate, for exogenous variables contained in the Western model and for the full complement of exogenous variables. These equations and estimations (unstandardized and standardized coefficients) are presented for males and females, respectively, in table 2. For a visual comparison of the results for males and females, we present path diagrams for the full-complement equations and the standardized path coefficients in figures 1 and 2.

## ESTIMATIONS

### Attaining Education

The first endogenous variable in the model is education. In equation (1) in table 2, education ( $E$ ) is regressed on father's education ( $E_F$ ) and father's occupation ( $O_F$ ), as in the Western model. As expected, father's education rather than father's occupation exerts greater effect on the educational attainment of the respondent. This intergenerational model accounts for 7% of the variance in education for males and 11% for females.

Using the zero-order correlation and path coefficients from Blau and Duncan's U.S. study (1967, pp. 169–70), we calculated that about a quarter (26%) of the variance of educational attainment for males was

TABLE 2  
UNSTANDARDIZED AND STANDARDIZED (IN PARENTHESES) REGRESSION COEFFICIENTS OF ATTAINMENTS OF EDUCATION, WORK-UNIT SECTOR, OCCUPATION, AND PARTY MEMBERSHIP ON FATHER'S AND ONE'S OWN STATUS, BY SEX

| DEPENDENT<br>VARIABLES                   | INDEPENDENT VARIABLES |                |                |                |             |                |                |   |                |  | Constant | R <sup>2</sup> | N   |
|--|-----------------------|----------------|----------------|----------------|-------------|----------------|----------------|---|----------------|--|----------|----------------|-----|
|  | Age                   | E <sub>F</sub> | O <sub>F</sub> | U <sub>F</sub> | E           | U <sub>W</sub> | O <sub>W</sub> | P | U <sub>Y</sub> |  |          |                |     |
| (1) Education (E)                        |                       |                |                |                |             |                |                |   |                |  |          |                |     |
| Male                                     | -.01 (-.05)           | .19 (.20)**    | .04 (.06)      |                |             |                |                |   |                |  | 2.98     | .07            | 325 |
| Female                                   | -.02 (-.18)**         | .15 (.16)*     | .12 (.20)**    |                |             |                |                |   |                |  | 3.22     | .16            | 296 |
| Difference                               | -.01                  | .04            | -.08*          |                |             |                |                |   |                |  |          |                |     |
| (2) Education (E)                        |                       |                |                |                |             |                |                |   |                |  |          |                |     |
| Male                                     | -.00 (-.00)           | .17 (.18)**    | .01 (.01)      | .20 (.14)*     |             |                |                |   |                |  | 2.41     | .08            | 322 |
| Female                                   | -.02 (-.15)**         | .10 (.11)      | .04 (.07)      | .38 (.26)**    |             |                |                |   |                |  | 2.35     | .20            | 290 |
| Difference                               | .02*                  | .07            | -.03           | -.18*          |             |                |                |   |                |  |          |                |     |
| (3) First work sector (U <sub>W</sub> ): |                       |                |                |                |             |                |                |   |                |  |          |                |     |
| Male                                     | -.00 (-.00)           | -.05 (-.07)    | .01 (.02)      | .32 (.32)**    | .17 (.24)** |                |                |   |                |  | 1.43     | .18            | 290 |
| Female                                   | .02 (.23)**           | .03 (.05)      |                | .02 (.02)      | .27 (.40)** |                |                |   |                |  | 1.11     | .18            | 290 |
| Difference                               | .02*                  | -.08           |                | .30**          | -.10        |                |                |   |                |  |          |                |     |
| (4) First job status (O <sub>W</sub> )   |                       |                |                |                |             |                |                |   |                |  |          |                |     |
| Male                                     | .03 (.22)**           | ...            | ...            |                | .60 (.43)** |                |                |   |                |  | .07      | .22            | 423 |
| Female                                   | .05 (.28)**           | .00 (.00)      | ...            |                | .66 (.44)** |                |                |   |                |  | -.64     | .21            | 324 |
| Difference                               | -.02                  | ...            | ...            |                | -.06        |                |                |   |                |  |          |                |     |



|                                    |             |             |      |             |              |             |     |     |       |
|------------------------------------|-------------|-------------|------|-------------|--------------|-------------|-----|-----|-------|
| (5) First job status ( $O_W$ ):    |             |             |      |             |              |             |     |     |       |
| Male                               | .04 (.29)** | ...         | ...  | .43 (.31)** | .82 (.44)**  | ...         | ... | ... | -2.03 |
| Female                             | .03 (.17)** | ...         | ...  | .36 (.24)** | 1.07 (.49)** | ...         | ... | ... | -1.88 |
| Difference                         | .01         | -.02        | -.05 | .08         | -.22*        | ...         | ... | ... | .39   |
| (6) Party membership ( $P$ ):      |             |             |      |             |              |             |     |     |       |
| Male                               | .01 (.13)*  | -.02 (-.04) | ...  | ...         | ...          | ...         | ... | ... | .10   |
| Female                             | .01 (.14)** | ...         | ...  | .04 (.15)*  | .02 (.04)    | .03 (.15)*  | ... | ... | .05   |
| Difference                         | .00         | ...         | ...  | ...         | ...          | ...         | ... | ... | .39   |
| (7) Current work sector ( $U_F$ ): |             |             |      |             |              |             |     |     |       |
| Male                               | .01 (.20)** | ...         | ...  | .11 (.20)** | .36 (.48)**  | .00 (.00)   | ... | ... | .120  |
| Female                             | ...         | .02 (.03)   | ...  | .13 (.19)** | .64 (.63)**  | ...         | ... | ... | .64   |
| Difference                         | ...         | ...         | ...  | -.02        | -.28*        | ...         | ... | ... | .53   |
| (8) Current job status ( $O_F$ ):  |             |             |      |             |              |             |     |     |       |
| Male                               | .03 (.18)** | ...         | ...  | .60 (.43)** | ...          | .32 (.31)** | ... | ... | -.18  |
| Female                             | ...         | .07 (.05)   | ...  | .48 (.31)** | ...          | .48 (.45)** | ... | ... | .43   |
| Difference                         | ...         | ...         | ...  | .12         | ...          | -.16        | ... | ... | .70   |
| (9) Current job status ( $O_Y$ ):  |             |             |      |             |              |             |     |     |       |
| Male                               | .02 (.13)** | ...         | ...  | .52 (.37)** | ...          | .29 (.29)** | ... | ... | -1.06 |
| Female                             | ...         | .04 (.03)   | ...  | .37 (.23)** | ...          | .39 (.37)** | ... | ... | .48   |
| Difference                         | ...         | ...         | ...  | .15         | ...          | -.10        | ... | ... | .42   |
|                                    |             |             |      |             |              |             |     |     | .296  |
|                                    |             |             |      |             |              |             |     |     | .48   |
|                                    |             |             |      |             |              |             |     |     | .46   |
|                                    |             |             |      |             |              |             |     |     | .290  |
|                                    |             |             |      |             |              |             |     |     | .05   |

NOTE.— $E_F$ ,  $O_F$  and  $U_F$  are father's education, father's occupation, and father's work-unit sector, respectively. Ellipses indicate that the variable was eliminated from the equation because of the multicollinearity problem or because correlation with the dependent variable was less than .10. Equation numbers are given in parentheses before each dependent variable.

\*  $p < .05$ .

\*\*  $p < .01$ .

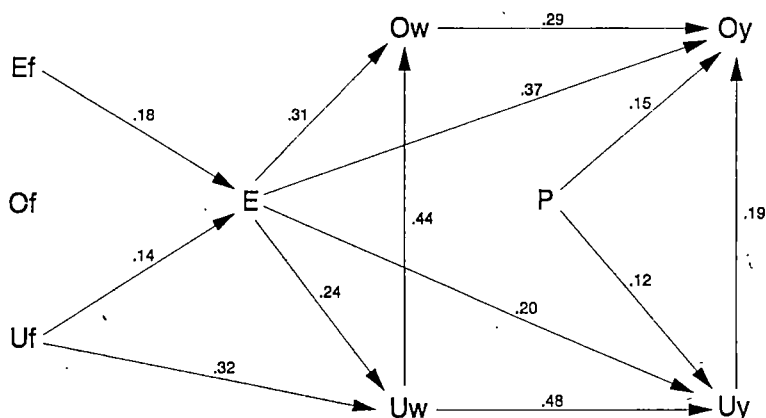


FIG. 1.—The status-attainment model and the estimates for males (after age has been controlled for).

accounted for by father's education and occupational status. Thus, compared with Western data, the explained variance is relatively low for China.

One explanation for this Chinese-U.S. difference could be that the measurement of occupation in our study differs from that used in the Blau and Duncan study. Further examination failed to confirm this explanation.<sup>9</sup> Instead, we felt that the difference might be due to the failure of the model to take into account the meaningful status measures in the Chinese context.

Equation (2) takes into account the sector in which the father's work unit ( $U_F$ ) is located as an additional exogenous variable. Now, the explained variance for education increases to 8% for males and 20% for females. Thus, once the appropriate status measure (work-unit status) is incorporated into the Chinese model, the intergenerational effect on education is evident.

For males, the effects of father's education and sector of work unit are similar in magnitude (.18 and .14 in standard coefficients, respectively). For females, on the other hand, the coefficient for father's work-unit

<sup>9</sup> We computed occupational prestige scores for father's occupation, according to the Lin-Xie index (Lin and Xie 1988), which is a formula similar to the Duncan SEI index but based on Chinese data and individual rather than cohort information. The analysis was done only for those who entered into the work force after 1949, since earnings before 1949 could not be standardized. The results showed that father's occupational prestige did not have a significant effect on sons' and daughters' educational attainment. The effects of father's work-unit sector and father's education (in the case of males) retained their magnitudes of significance.

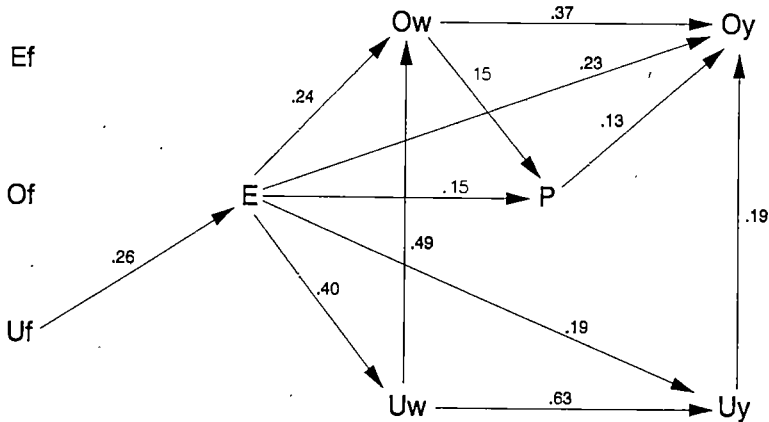


FIG. 2.—The status-attainment model and the estimates for females (after age has been controlled for).

sector is about two and one-half times higher than that for father's education (.26 and .11, respectively). For both men and women, father's occupation does not have any significant effect on educational attainment.

Why, then, should father's work-unit sector be so much more important in explaining females' education? One plausible explanation is that the sectors differentially represent structural resources. Housing is either directly provided from the work unit or obtained through it (Whyte and Parish 1984; Walder 1986). In either case, better work units tend to provide better housing and this housing tends to be located in districts where better schools are located (Bian 1990). Furthermore, such segregated housing arrangements provide differential neighborhood environments and interactional opportunities for the children. In this resource-rich environment, both sons and daughters were able to receive adequate educations. On the other hand, in the peripheral sectors, quality and facilities in both schools and housing environments are limited and restrained. In this resource-poor environment, a choice must be made in the investment of children's education. Under this condition, the traditional prejudice in favor of male offspring weighs heavily.

If this analysis is correct, the gender differences in education should occur primarily in the peripheral sectors and not in the core sectors. Analysis of average educational levels for males and females by father's work-unit sector indeed shows that the male/female ratios are the greatest in the private (1.48) and collective sectors (1.20) and virtually disappear in the state enterprises (1.08) and agencies (1.01).

Table 3 summarizes findings from various studies regarding parental effects on educational attainment in China. It is apparent that the find-

TABLE 3  
EDUCATIONAL ATTAINMENT IN CHINA

| STUDY                                    | INDEPENDENT VARIABLE IN EQUATION |                           |                     |                      |     | R <sup>2</sup> |
|--|----------------------------------|---------------------------|---------------------|----------------------|-----|----------------|
|  | Father's Education               | Father's Work-Unit Sector | Father's Occupation | Father's Class Label | Age | Gender         |
| Whyte-Parish (1972-77) neighbors sample: |                                  |                           |                     |                      |     |                |
| Pre-1966 cohort                          | *                                |                           | *                   | †                    | †   | *              |
| 1966-77 cohort                           | †                                |                           | †                   | †                    | *   | †              |
| Xie-Lin (1983) Beijing sample:           |                                  |                           |                     |                      |     |                |
| Males                                    | *                                |                           | †                   |                      |     | .11            |
| Females                                  | *                                |                           | †                   |                      |     | .20            |
| Blau-Ruan (1987) Tianjin sample          | *                                |                           | †                   |                      |     | .09            |
| Lin-Bian (1985) Tianjin sample:          |                                  |                           |                     |                      |     |                |
| Basic model:                             |                                  |                           |                     |                      |     |                |
| Males                                    | *                                |                           | †                   |                      |     | .06            |
| Females                                  | *                                |                           | *                   |                      |     | .13            |
| Extended model:                          |                                  |                           |                     |                      |     |                |
| Males                                    | *                                | *                         | †                   |                      |     | .08            |
| Females                                  | †                                | *                         | †                   |                      |     | .18            |

NOTE.—Father's occupation is measured by (1) the 32 categories ranked by income status in the Whyte-Parish study; (2) occupational status in the Xie-Lin study and the Blau-Ruan study; and (3) the eight ranked categories in the Lin-Bian study.

\* Partial regression coefficient significant at the .05 level.

† Variable in equation, but coefficient not significant at the .05 level.

ings are quite consistent, especially in the discrepancy for males and females of such effects.

### Entering the Labor Structure

The next endogenous variable is the sector of the work unit in which the respondent found his or her first job. We used the four-category measure in table 2 to represent the sectors. The measure, while consisting of four categories reflecting the four segments, is also considered as an indicator of a dual-segment system with state agencies and enterprises as the core segment and the collectives and private enterprises as the peripheral.

As expressed in equation (3) in table 2 there is a difference between males and females. For males, both father's work-unit sector and his own educational attainment are significant predictors (unstandardized coefficients of .32 and .17, respectively). For females, on the other hand, only their own educational attainment is a significant contributor (.27). Their father's work-unit sector has no effect (.02).

We can more precisely decompose the relative effects of the ascribed (father's education,  $E_F$ , and father's work-unit sector,  $U_F$ ) versus the achieved (own education,  $E$ ) factor on one's probability of entering into a state agency/enterprise rather than a collective or private one ( $U_W$ ).

For males, the total effects on first-job work-unit sector ( $U_W$ ) can be decomposed, from figure 1, into the following components: (1) direct effect of father's work-unit sector ( $U_F$ ) = .32; (2) indirect effect of  $U_F$  through education ( $E$ ) ( $.14 \times .24$ ) = .03; (3) indirect effect of father's education ( $E_F$ ) through education ( $E$ ) ( $.18 \times .24$ ) = .04; and (4) the pure effect of education ( $.24 - .03 - .04$ ) = .17. From these decomposed effects relative to their total effects on first-job work-unit sector ( $U_W$ ) ( $.32 + .24 = .56$ ), the estimated likelihood of a Chinese male entering into a particular sector is 70% due to intergenerational effects [ $(.32 + .03 + .04)/.56$ ] and about 30% due to his own educational attainment.

We can conclude, therefore, that, in Tianjin, a Chinese male's likelihood of entering into the state rather than the other sectors is in large part due to the father's influence and much of that influence is due to the father's position in the segmented labor structure.

The picture for females is significantly different. As can be seen in figure 2, the total effect on first-job work-unit sector ( $U_W$ ) can be decomposed into two parts: (1) the indirect effect of father's work-unit sector ( $U_F$ ) through education ( $.26 \times .40$ ) = .10 and (2) the pure effect of education ( $.40 - .10$ ) = .30. In other words, entering into a more desirable work-unit sector, for Chinese females, depends much more on her own educational attainment (75% of the effect,  $.30/.40$ ) than intergenerational transmission of ascribed and achieved status. The intergenera-

tional transmission of ascribed status ( $U_F$ ) only accounts for the remaining 25% of the effect on first-job work-unit sector ( $U_W$ ), and all of this effect is indirectly through education.

In summary, entering into a more desirable work-unit sector in China takes on differential significance and process for the males and females. For males, a substantial intergenerational effect involving direct parental intervention is evident. For females, it depends to a great extent on their own educational attainment.

For finding an occupation we construct two equations. Equation (4) in table 2 regresses first-job occupation ( $O_W$ ) on father's education ( $E_F$ ), father's occupation ( $O_F$ ), and education ( $E$ ), those factors used as predictors in the Western model. For both males and females, education is the most important determinant and very little direct influence of intergenerational effect is evident. The effect of education is quite similar for both males and females (unstandardized coefficients of .60 and .66, respectively). The explained variance for  $O_W$  is about .22 for males and .21 for females.

The effect of education on first-job occupation for males and females in China, therefore, is very similar to that found in the United States. Blau and Duncan's (1967) data showed a path coefficient of .44 from education to first-job occupational status for males. However, the U.S. data also showed a significant direct contribution from father's occupational status to son's first-job status. Thus, these two variables accounted for 29% of the variance for first-job status for U.S. males.

Equation (5) in table 2 then incorporates work-unit sector for both the father ( $U_F$ ) and the respondent ( $U_W$ ) as additional exogenous variables. As can be seen,  $U_W$  exerts direct and strong effects on  $O_W$ , especially for females. The  $R^2$  is significantly increased, from .22 to .39 for males and .21 to .41 for females. No direct intergenerational effects are evident for either males or females.

The data suggest that there is a stronger correspondence of work-unit sector and first-job occupation for females than for males. That is, when the females entered into state agencies or enterprises, they also tended to get better (white-collar) jobs than those other females who entered into collectives. For males, such a correspondence is not as strong, suggesting that even entering into collectives may not rule out their securing more desirable occupations. Obviously, then, the work-unit sector represents a stronger segmented occupational structure for females. Entering into the core sector means not only receiving better resources but also having the opportunity to attain better jobs.<sup>10</sup>

<sup>10</sup> That the females tend to do better in the core sectors than in the peripheral sectors in the Chinese labor structure is different from the trends observed in Japan (Brinton

### Becoming a Party Member

Party membership is the next endogenous variable in the causal model. As shown in table 2, regression of party membership, equation (6), on exogenous variables has no significant predictors, among the male respondents. For females, however, it is significantly affected by education and occupation at the first job.<sup>11</sup>

Party membership probably represents an achieved status resulting from loyalty and achievement. The data confirm a causal effect of achievement (education and first job) on party membership for females, but they do not confirm such an effect for males. These data suggest that perhaps future research should explore such other dimensions as a worker's ideological presentations and interpersonal skills for a better explanation of party membership, especially for males.

When party membership is regressed on the set of independent variables in equation (6) for both males and females and with gender added as the additional independent variable, we find that gender significantly affects party membership in favor of males.<sup>12</sup> That is, males are more likely to become party members than females, even when they have similar parental characteristics, educational background, and first-job occupational and sector statuses. This result reinforces the speculation that males are favored to become party members.

### Changing Work-Unit Sectors

When each respondent was asked whether there was a job change from the first job or the first work unit, about 40% (42.9% of the males and 38.0% of the females) of the respondents reported that there was. In other words, about 60% of the respondents still worked at their first jobs in their original work units at the time of this study.

About 22% of both male and female respondents (21.8% of males and

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1989) where gender difference remained strong in the core sectors. Few females in the Japanese core sectors could obtain permanent occupations. We suspect that in the Chinese political economy, occupation is not as important a status criterion as in most capitalist societies, since it is permanent for every occupant and occupational mobility is mostly based on seniority. Gender differentiation is focused instead on other status criteria such as party membership and cadre status. We shall analyze party membership later in this article. The issue of cadre status, however, is beyond our scope here.

<sup>11</sup> The percentage of the party membership was 21% among males and 11% among females. Thus, the regression analysis probably would not induce any biased estimates for males. However, because of the skewedness of the female distribution, the estimates for female data are much less reliable.

<sup>12</sup> The partial regression metric coefficient is .09 and the standardized coefficient is .12, significant at the .01 level.

TABLE 4

## WORK-UNIT SECTOR MOBILITY FROM FIRST TO CURRENT JOBS

| WORK-UNIT SECTOR<br>FOR FIRST JOB | WORK-UNIT SECTOR FOR CURRENT JOB |                            |                   |                |
|-----------------------------------|----------------------------------|----------------------------|-------------------|----------------|
|                                   | State<br>Agency<br>(%)           | State<br>Enterprise<br>(%) | Collective<br>(%) | Private<br>(%) |
| <b>Males:</b>                     |                                  |                            |                   |                |
| State agency (57) .....           | 70.2                             | 29.8                       | 0                 | 0.0            |
| State enterprise (218) .....      | 9.2                              | 88.2                       | 2.3               | 0.0            |
| Collective (94) .....             | 19.2                             | 34.0                       | 46.8              | 0.0            |
| Private (31) .....                | 6.5                              | 87.1                       | 6.5               | 0.0            |
| <b>Females:</b>                   |                                  |                            |                   |                |
| State agency (65) .....           | 76.9                             | 21.5                       | 1.5               | 0.0            |
| State enterprise (176) .....      | 9.7                              | 82.4                       | 8.0               | 0.0            |
| Collective (116) .....            | 9.5                              | 12.1                       | 78.5              | 0.0            |
| Private (2) .....                 | 0.0                              | 0.0                        | 50.0              | 50.0           |

NOTE.—Cases of "don't know" or "no answer" in either first or current work-unit sector are excluded. *N*'s of valid cases are in parentheses.

23.2% of females) reported job changes within the same sector. We do not know how many of these changes occurred across work units within the same sector and how many occurred within the same work units. In any event, a large portion of those, about 14%, did not change occupational categories, another 7% changed to better occupations, and less than 2% reported changing to worse occupations.

Because our primary interest here is in mobility across sectors, we combine those with job changes within the same sector with those who did not change jobs. We construct a mobility-across-sector table for the first and current jobs and present the results separately for males and females in table 4.

Slightly over 20% of male respondents (21.1%) and about 15% of female respondents (14.9%) changed jobs across sectors (i.e., from a state unit to a collective unit or vice versa). The likelihood of moving into a better sector differed for males and females. As can be seen in table 4, cross-sector movements for those males who began in the high-status sectors (i.e., state agencies or enterprises) were almost exclusively to the other state sector. A surprisingly large percentage of those who began their careers in the collective or private sectors, on the other hand, now worked in the state sectors. Over 60% (63.2%) of those males originating in the collective and private sectors had moved to the state agencies or enterprises.

The same trends held for the females. However, the extent of such



TABLE 5

LOG-LINEAR ANALYSIS OF GENDER DIFFERENCES IN WORK-UNIT SECTOR MOBILITY  
FROM FIRST TO CURRENT WORK-UNIT SECTORS,  $N = 782^*$

| Model (Null Hypothesis)                            | $\chi^2_{LR}$ | df |
|--|---------------|----|
| A. Full mobility matrix ( $4 \times 4 \times 2$ ): |               |    |
| 1. $[U_c][U_1][S]$ .....                           | 652.52        | 24 |
| 2. $[U_c U_1][S]$ .....                            | 493.74        | 21 |
| 3. $[U_c U_1][U_1 S]$ .....                        | 473.88        | 19 |
| 4. $[U_c U_1][U_c S]$ .....                        | 454.76        | 19 |
| 5. $[U_c U_1][U_c S][U_1 S]$ .....                 | 422.34        | 16 |
| A2 vs. A1 .....                                    | 158.78        | 3  |
| A3 vs. A2 .....                                    | 19.86         | 2  |
| A4 vs. A2 .....                                    | 38.98         | 2  |
| A5 vs. A4 .....                                    | 32.42         | 3  |
| B. Main diagonal blocked (movers):†                |               |    |
| 1. $[U_c][U_1][S]$ .....                           | 197.79        | 17 |
| 2. $[U_c U_1][S]$ .....                            | 74.78         | 16 |
| 3. $[U_c U_1][U_1 S]$ .....                        | 60.18         | 14 |
| 4. $[U_c U_1][U_c S]$ .....                        | 59.71         | 15 |
| 5. $[U_c U_1][U_c S][U_1 S]$ .....                 | 35.23         | 12 |
| B2 vs. B1 .....                                    | 123.01        | 1  |
| B3 vs. B2 .....                                    | 14.60         | 2  |
| B4 vs. B2 .....                                    | 15.07         | 1  |
| B5 vs. B4 .....                                    | 24.48         | 3  |

NOTE.—All results for  $\chi^2_{LR}$  and  $df$  are significant at less than .001.

\* There were 90 cases excluded from the analysis because of the missing values of these cases.

† This analysis was based on a  $3 \times 4 \times 2$  matrix, rather than a  $4 \times 4 \times 2$  one. There was no private worker left in the current sector after the main diagonal was blocked. The category of the private worker in the current sector was therefore deleted in order to conduct the analysis.

upward movements was much less. There were, for example, some who began careers in the state sectors but moved to current jobs in the collectives (1.5% of those from the state agencies and 8% from the state enterprises) and only 21% of those females who began careers in the peripheral (collective and private) sector had moved up to the core sector (state agencies and enterprises).

In table 5, we present estimates from log-linear models to verify the significance of sex on first-to-current job mobility patterns. Both full-mobility data (including immobility) and mobility-only data (excluding immobility) are analyzed. The results clearly show that the interaction between sex and the mobility patterns is significant.

We also examine various characteristics of respondents with different mobility statuses. The data demonstrate that moving up to the core sectors promotes one's socioeconomic status in terms of occupational prestige and earnings. One interesting note is that those males who moved

"downward" from the state sectors to the collectives tended to be those who had a reasonably high education and maintained job prestige and earnings. No such retention effects were found for females. We suspect that these males tended to be cadres sent down to manage and administer the collectives, who were only willing to go to the collectives if such advantages were maintained. No such considerations were evident for females who moved from the state to the collective sectors.

These data provide substantial confirmation of the earlier speculation that the state sector constitutes the core sector, since the movements, if they occur, are systematically asymmetric: from the collectives to the state sectors and from the state enterprises to state agencies. Furthermore, the likelihood of such upward movements significantly differs for males and females and such movements result in increased socioeconomic status.

#### Attaining Current Sectors and Jobs

Equation (7) in table 2 shows that the sector of current work unit ( $U_Y$ ) has differential causes for males and females. For males, the first job's work-unit sector ( $U_W$ ) has the largest effect (standardized coefficient of .48), followed by education (.20), and party membership (.12). The effect of  $U_W$  represents to a large extent the immobility (or stability) within a segment of the occupational structure (state vs. collectives). The extent to which a male can move from one sector to another (after we account for those who stayed in the same sectors) reflects upward mobility and a move into the state sectors. And such movement is aided by age, education, and party membership.

For females, current job's work-unit sector ( $U_Y$ ) is primarily determined by the work-unit sector at the time of entering into the labor structure (standardized coefficient of .63), and moderately by education (.19). Thus, there is strong evidence that immobility (stability) within work-unit sectors is much stronger for females than for males and that moving from collectives to the state sector is relatively rare for females. To the extent it is accomplished, it is affected by education. No discernible effects from age, occupation at the first job, or party membership, parallel to those for males, are evident for females.

It is quite clear, then, that cross-sector and upward mobility is much stronger for males than for females. This mobility, for males, is accomplished by bringing to bear both education and party membership. For females, such mobility is much less likely to occur and, when it does occur, education seems to be the sole determinant.

Finally, equations are computed for the occupation of the current job ( $O_Y$ ). Equation (8) expresses it as a function of exogenous variables used

in the Western model ( $E_F$ ,  $O_F$ ,  $E$ , and  $O_W$ ), and equation (9) adds the work-unit sector of the first and current jobs ( $U_W$  and  $U_Y$ ). As in the Western model, the current job status ( $O_Y$ ) is primarily determined by first job ( $O_W$ ) and education ( $E$ ). This is true for both males and females. For the Chinese, however, work-unit sector and party membership also contribute to the current job status. These exogenous variables explain about 48% and 46% of the current job variances for males and females respectively.

#### FURTHER ANALYSIS: USE OF SOCIAL RESOURCES

Once the intergenerational effect has been found, we need to explore the actual mechanisms by which such an effect is transmitted. Furthermore, it is important to ascertain whether such mechanisms also differ for males and females, since father's statuses directly affect sons' work-unit sectors but not daughters'.

In the study of the job-search process in Western capitalist states, research has found that use of social ties and, specifically, ties with better resources has increased the chance of entering or moving to better occupations (Granovetter 1974; Lin, Ensel, and Vaughn 1981; Marsden and Hurlbert 1988; DeGraaf and Flap 1988). In China, the importance of interpersonal ties (*guanxi*) in the functioning of individuals has long been noted (Whyte 1984; Gold 1985; Walder 1986; Yang 1986). Thus, we suspect that the use of such *guanxi* or their resources might provide one mechanism by which parental resources can promote children's finding the right work units. It would also be interesting to explore whether the use of *guanxi* and their social resources generated different results for sons and daughters.

We conducted an examination, therefore, to determine the extent to which the respondents used personal contacts in entering the work force and whether this use was affected differentially by father's statuses. In the survey, each respondent was asked whether anyone helped when they entered the labor force or moved to the current job, and, if so, what statuses (work-unit sector and occupation) the helper possessed. It was found that, for males, father's status characteristics were positively related to the likelihood of accessing contacts located in the state work units. Furthermore, these contacts increased the likelihood of one's entering into the state work units. Such relationships were absent for females. What these results suggest is that parental resources are employed in finding the right *guanxi* which, in turn, promotes the opportunity for the son to enter into the desirable work units. Details of this analysis are available elsewhere (Lin and Bian 1989).

Why the process did not work for females poses a further conceptual

issue. Three possible explanations can be postulated. One cause might be that fathers selectively choose social contacts and, for sons, make a maximal effort to get the right contact, whereas for daughters, their effort is less than maximal. A second possibility is that the contact exercises different efforts. Still a third possibility is that the target work unit recruits selectively by gender. There is some strong evidence that the third practice pervasively exists in China today (Honig and Hershatter 1988, chap. 7). These practices deserve further research attention in China as well as elsewhere, in order to explicate the actual dynamics of intergenerational influence in status attainment.

## DISCUSSION

In concluding, we wish to highlight four important issues. The first issue derives from the argument that political economy determines the social stratification system. Segmentation of the economic and labor structures, therefore, is not unique to the market-economy system. Each political economy sets criteria in segmenting the structures, and priority is assigned to each segment accordingly. The data from urban China clearly demonstrate that segmentation based on the work-unit ownership criterion is both conceptually meaningful according to the political-economic ideology and empirically significant relative to the distribution of social (education and occupation), economic (wages and bonuses) and political (party membership) resources (see table 1). These arguments and findings challenge the theoretical assumption that segmentation is uniquely associated with the development of the capitalist economy. Reassessment and reformulation of the theoretical foundation for the structural segmentation phenomenon are clearly in order.

Second, it was argued that the segmentation phenomenon should not only be treated as a structural feature but also as an important identification for the individual workers striving for attainment in the labor structure. The inequality of allocation, processing, and production of material and of labor resources that is embedded in the segmented structure makes the seeking and landing in the "right" location in the structure a paramount consideration in job search and job mobility. Thus, segmentation identification becomes a status criterion and destination in the process of status attainment. Our data confirm the significance of work-sector status as a destination variable in the status-attainment process in urban China. Future studies of social mobility in all political economies, including those in the market economy, must incorporate segmentation identification as a status-destination variable.

Third, a further implication of the political economy and segmentation thesis advanced here concerns the controversy over the industrialization-

attainment issue. To conduct appropriate empirical tests of the thesis requires incorporation of proper status criteria and destinations for each society. Ambiguity of results in past research may be due in large part to (1) the lack of attention given to segmentation identification as an appropriate status-destination variable and (2) the uniformed application across societies of status criteria (such as occupational status and income) uniquely suited to a particular political economy (such as the market economy). The fact that segmentation, appropriately specified according to each political economy, is seen as a meaningful status destination suggests that the industrialization-achievement controversy can be clarified only if segmentation identification is incorporated as a status variable. It may well be true that, for certain political economies, such as the market economy or the capitalist state, criteria such as occupation and income remain significant. It, nevertheless, becomes critical that segmentation identification, meaningfully constructed according to the political economy associated with each society, be adopted as a status variable. Only when appropriately specified status variables are taken into account, can a proper assessment of the relative effects across societies of ascribed versus achieved characteristics in the status-attainment process be made.

While we have identified political economy (and, therefore, structural segmentation) and industrialization as potentially useful explanatory schemes in understanding social mobility, our data also suggest their potential limits. This study offers evidence that at least two social phenomena seem to transcend levels of industrialization or types of political economy: gender difference and use of social networks and social resources.

Data clearly showed that females entering and moving into the core work-unit sectors are primarily affected by education rather than by family background. The industrialization thesis has no explicit provision to anticipate this gender difference. Because China is not considered an advanced industrial state, the industrialization thesis would predict that ascribed effect, as reflected in intergenerational effects, should remain. However, our data show that this effect operates primarily for males and not for females. Similarly, the persistence of the gender effect across different political economies (the state-socialist society and the capitalist society) also suggests that this effect has yet to be overcome by the current state of any particular political economy.<sup>13</sup>

<sup>13</sup> However, much of the data brought to bear on the industrialization-attainment thesis had come from male samples (Treiman and Yip 1989). Also, we lack mother's socioeconomic variables for examination of possible mother-daughter intergenerational effects. Thus, the thesis needs substantial further empirical verification.

# APPENDIX

TABLE A1  
ZERO-ORDER CORRELATIONS, MEANS, AND STANDARD DEVIATIONS OF VARIABLES USED IN TABLE 2

|             | Age   | $E_F$ | $U_F$ | $O_F$ | $E$  | $U_W$ | $O_W$ | $P$  | $U_Y$ | $O_Y$ | Mean  | SD    |
|-------------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|
| Age .....   | ...   | -.18  | -.47  | .39   | -.11 | -.18  | .17   | .18  | .12   | .19   | 42.35 | 10.26 |
| $E_F$ ..... | -.13  |       | .40   | .56   | .24  | .12   | .01   | -.13 | .05   | .04   | 2.16  | 1.08  |
| $U_F$ ..... | -.27  | .50   |       | .55   | .23  | .35   | .05   | -.15 | .02   | -.05  | 2.70  | .77   |
| $O_F$ ..... | -.28  | .59   | .63   |       | .20  | .20   | -.03  | -.18 | -.03  |       | 2.74  | 1.68  |
| $E$ .....   | -.26  | .30   | .40   | .34   |      | .29   | .41   | .05  | .33   | .53   | 3.30  | 1.05  |
| $U_W$ ..... | .12   | .15   | .14   | .09   | .36  |       | .48   | -.10 | .49   | .25   | 2.78  | .77   |
| $O_W$ ..... | .17   | .10   | .09   | .07   | .37  | .60   |       | .01  | .35   | .52   | 2.72  | 1.68  |
| $P$ .....   | .13   | .05   | -.08  | -.03  | .18  | .20   | .25   |      | .12   | .22   | .21   | .40   |
| $U_Y$ ..... | .04   | .17   | .16   | .13   | .42  | .70   | .39   | .30  |       | .44   | 3.08  | .57   |
| $O_Y$ ..... | .09   | .19   | .16   | .17   | .49  | .44   | .57   | .11  | .46   | ...   | 3.43  | 1.89  |
| Mean .....  | 39.74 | 2.29  | 2.83  | 2.93  | 3.05 | 2.84  | 2.80  | .11  | 2.90  | 3.44  | ...   | ...   |
| SD .....    | 8.28  | 1.15  | .70   | 1.83  | 1.03 | .70   | 1.76  | .31  | .72   | 1.99  | ...   | ...   |

NOTE.—Entries in the upper diagonal are correlations, means, and standard deviations (SD) for males and entries in the lower diagonal for females. Symbols used are:  $E_F$  = father's education;  $U_F$  = father's work-unit sector;  $O_F$  = father's occupation;  $E$  = respondent's education;  $U_W$  = respondent's first work-unit sector;  $O_W$  = respondent's first occupation;  $P$  = respondent's party membership;  $U_Y$  = respondent's current work-unit sector; and  $O_Y$  = respondent's current occupation.

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# Features of Educational Attainment and Job Promotion Prospects<sup>1</sup>

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In much sociological research on occupational achievement it is presumed that the full effect of education can be understood from an examination of years of schooling. It is also commonly assumed that the impact of education on career development can be investigated without reference to an individual's current organizational rank. This article shows that, with reference to promotion, several features from an employee's educational biography will influence his or her rate of advancement. It is also shown that the returns to years of schooling—and to other educational measures—vary with organizational rank; indeed, employers do not reward educational attainment indiscriminately, but only when it is likely to contribute to productivity. In conclusion, it is noted that whereas the "job-matching" literature argues that the rate of mobility is greatest when the fit between an individual's resources and a job's requirements is poor, the results with regard to promotion suggest that the converse is true.

## I. INTRODUCTION

While there is a considerable literature that documents the impact of education on earnings, occupational status, and the likelihood of promotion (e.g., Mincer 1974; Blau and Duncan 1967; Jencks et al. 1972; Rosenbaum 1979; Wise 1975*b*), the assessments differ concerning which facets of educational achievement are, in fact, rewarded in the marketplace. In the status-attainment literature it is commonly assumed that a single

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summary measure—years of schooling—captures the full effect of education (Faia 1981). Economists are more sensitive to the different dimensions of education and distinguish between general and firm-specific training, while also noting that labor force experience frequently can be substituted for schooling (Blaug 1976; Sicherman 1991).

Both economists and sociologists have examined the effects of *educational credentials*, viewed separately from years of schooling. It has been argued that certification (whether high school completion or a college degree) conveys information to the effect that the minimum standard of performance for the credential has been met (Layard and Psacharopoulos 1974; Faia 1981; Collins 1979). Spence (1973) and Arrow (1973), among others, view credentials as a “signal” to a prospective employer about the competence of a job applicant, important to the extent that more reliable indicators are lacking. Presumably, after employment, with the passage of time, the significance of a credential would be superseded by direct measures of performance. Nonetheless, there is evidence that some firms continue to reward credentials, as a matter of policy, over the full course of a worker’s career (Spilerman 1986).

The issue of *educational quality* has also been a focus of research. This theme has been articulated in two ways. It has arisen in explanations of the generally smaller income returns to education among certain ethnic minorities; the thesis offered is that, because of residential segregation, blacks and Hispanics, especially, have limited access to good schools and hence receive inferior training (Reynolds 1978, pp. 266–67; Welch 1973, pp. 893–907). The issue of quality has also been invoked in explanations of the differential returns to education by labor-market sector (Wachter 1974, pp. 651–58), a topic to which we turn momentarily. A related question concerns the impact of prestige of the undergraduate school, an indicator of status affiliations, as well as, presumably, of institutional quality (Kanter 1977; Collins 1979, pp. 35–43).

Less attention has been given to investigating the returns to education in different work settings. There are hypotheses regarding possible variations in the effect of schooling among work positions, such as the formulations of dual labor market theorists (Osterman 1975; Tolbert, Horan, and Beck 1980). It is argued, in this perspective, that income returns are higher in primary-sector firms (variously defined) than in secondary ones. The proposed explanation is a structural one that emphasizes the linkage of jobs into hierarchical ladders in internal labor markets and the concomitant opportunity for occupational advancement and salary growth, which is influenced by educational attainment. Andrisani (1973) reported results consistent with this thesis, though his analysis has been faulted on methodological grounds by Cain (1976). For more recent support of

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the segmented labor market thesis, see Osberg, Apostle, and Clairmont (1987).

### II. EDUCATION AND PROMOTION

An essential motivation for investigating promotion processes is the intimate linkage that this topic bears to the study of occupational achievement. Promotion is a principal means of growth in occupational status; as a consequence, investigations into the determinants of promotion (e.g., Wise 1975*b*; Medoff and Abraham 1980, 1981; Grandjean 1981; Rosenbaum 1979; Bielby and Baron 1983) have contributed to our comprehension of the dynamics of status attainment over the life course.

Promotion refers to change of rank within an organization. Rank, or grade level, differentiates among workers with respect to status, power, and salary; hence, any change in the determinants of promotion, as one moves up the organizational ladder, would reveal how an individual's ultimate occupational achievement is patterned by particular background variables. For example, while race and gender may have little impact on advancement prospects in low salary grades, it has been suggested (e.g., Kanter 1977, pp. 66–67; Auster 1988, p. 138) that these personal attributes are significant factors in promotion decisions at higher levels.

Few studies have examined how the determinants of promotion vary with organizational rank. Employees from different salary grades commonly are grouped together in an analysis (e.g., Wise 1975*b*; Bielby and Baron 1983; Medoff and Abraham 1980); in doing so it is implicitly assumed that the factors which influence advancement at one organizational level play a corresponding role at a different rank. Some exceptions are Rosenbaum (1979) and DiPrete and Soule (1988). The former documented diverse age  $\times$  education effects on the promotion rate for three occupational groups; the latter, in an analysis of gender and advancement, reported quite different results by salary grade level.

In this article we examine the particular role of educational attainment in the promotion process. As we have intimated there are reasons for believing that the payoff to education is complex and is allocated among the different dimensions of educational achievement—years of schooling, credentials, school quality, and the like.<sup>2</sup> There also are reasons for con-

<sup>2</sup> In an examination of the determinants of salary increases among school teachers, Spilerman (1986) reported that some school systems reward number of course credits beyond the baccalaureate, other systems reward advanced degrees but not course credits, and still others reward mixtures of the two education measures, in various combinations.

sidering whether the impact of education (more precisely, its several components) differs by rank in an organization.

There is a basis for suggesting that the returns to education will vary with level in a firm. We expect, for example, graduate school training to be pertinent to job performance (and advancement, as a reward for superior work) in middle and senior grades, the organizational ranks in which relevant job skills are likely to have been imparted by specialized academic study. Similarly, we expect prestige of the undergraduate institution—an indicator of class and fraternal loyalties—to be salient to advancement in high salary grades because of the singular importance, at this level, of sponsorship and patronage for career success (Kanter 1977, pp. 61, 181–84).

The analysis in this paper is organized around a consideration of four facets of educational achievement: years of schooling, earned degrees, quality of the undergraduate school, and college major. Each facet has received some prior consideration with respect to occupational attainment, though not necessarily in a framework that explores its salience in a context of organizational rank. Some reasons for examining these educational features were noted in the introduction; to further motivate the investigation we propose several hypotheses, which either represent inferences from the status attainment literature or, where that literature is lacking, summarize what appears to be common wisdom on the subject.

### Years of Schooling

This variable measures general education, in contrast with firm-specific or job-specific training (Mincer 1974). General education enhances analytic and communicative skills and increases intellectual flexibility (Kohn 1969, pp. 183–88) and, presumably, adaptability in new job assignments—except where specific technical knowledge is required. Because jobs differ by salary grade in required level of education, as an entry prerequisite, matching models (e.g., Mobley 1982; Sørensen 1977, 1982) predict a corresponding variation between organizational rank and years of schooling.

A more refined formulation would note that the impact of an added year of study depends on current educational attainment, as well as on salary grade. In low organizational ranks an additional year after high school could contribute more to superior job performance (and advancement prospects) than an equivalent period of study after the bachelor's degree. This is because language and computation skills, which are crucial to success in clerical and secretarial positions, are mastered in secondary school or in the initial years of college. In high organizational ranks, in comparison, college and postgraduate study would be the critical levels

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of education that enhance job performance. This formulation suggests that, in each grade, the returns to schooling are nonlinear, with the inflection point—the educational level at which additional study has its greatest impact—increasing over the salary grades.<sup>3</sup>

### Credentials

The empirical evidence concerning the importance of earned degrees, above years of schooling, is inconclusive. Faia (1981), analyzing data from the 1977 NORC General Social Survey (GSS), found a substantial impact of academic degrees on occupational prestige, but a weaker effect on earnings. Taubman and Wales (1973) also reached a favorable assessment about the contribution of earned degrees. Layard and Psacharopoulos (1974), in contrast, found little supporting evidence for credentials and concluded that, while “screening is a part of the explanation [of earnings differentials], . . . evidence suggest[s] that [it] is not a major part” (p. 995).

We examine two issues which bear on the role of credentials. First, extending the argument in the preceding section, we suggest that, if credentials matter, it is the academic degree most relevant to job performance in a particular grade that will have the greatest impact on advancement prospects from that rank. Thus, for example, business/secretarial certification and junior college completion should influence the promotion rate in low salary grades, while college and advanced degrees should play the same role in higher organizational ranks.

The second issue concerns the different meanings of credential effects, their formulation and measurement. In the framework of the human capital model, earned degrees, like years of schooling, are viewed as investments that increase cognitive skills, thereby enhancing productivity (Arrow 1973, Gintis 1971). In this formulation, a credential certifies completion of a program of study with a certain level of attainment. A variant of this thesis would have at least some of a credential's association with productivity arising from the sorting of individuals in school on the basis of ability (Taubman and Wales 1975, pp. 96, 110; Arrow 1973); in short, credentials would be seen as tapping heterogeneity among workers rather than differences in learned skills.

In either formulation it is presumed that an employer does not reward credentials, *per se*, but productivity. Both explanations are versions of the omitted variable problem: in a promotion regression a significant

<sup>3</sup> To be precise, we assume that the first derivative is positive and increasing with years of schooling for values below the inflection point, and positive and decreasing for values above the inflection point.

credential term arises from the correlation of the credential with an unmeasured variable—learned cognitive skills in the first instance, innate ability in the second. It is the unmeasured variable, however, that is the true determinant of productivity (and promotion). It is not possible with our data to distinguish between these two formulations, as we lack measures of ability and cognitive skills. Both explanations predict significant additive effects of earned degrees, net of years of schooling.

By “credentialism” something different is intended. This concept refers to a tendency by employers to reward earned degrees, *apart* from any contribution they make to productivity (Faia 1981; Jencks et al. 1979, pp. 70–83; Harrison 1972, pp. 30–37). Such seemingly irrational behavior is explained in terms of the social value of credentials: a preference by firms for workers who have acquired conventional standards of sociability, who are culturally compatible, who are presumed capable of internalizing organizational goals, and who are therefore deemed “promotable” (Collins 1979, pp. 19–48; Meyer 1977). The empirical evidence in regard to this thesis is, however, contradictory (Blaug 1976, pp. 845–50).

A particular formulation of credentialism relates to optimization strategies available to a firm in a context of uncertainty about worker performance. With respect to promotion and salary decisions concerning new hires, Spence (1973) and Arrow (1973) observe that an employer might utilize credentials (or other attributes) as “signals” about expected productivity. With the passage of time the importance of a credential would decline, as performance records become available and supplant the need for a signal. Both Spence and Arrow note that if an employer correctly weighs the credential (signal), based on prior experience with its relation to performance, the credential term would provide an unbiased estimate of productivity differences between the groups; its effect (in a regression with productivity unmeasured) would not change as an employer shifts from reliance on the signal to an evaluation of a worker’s performance record.

There is a basis, however, for suggesting that employers *overweigh* the signals. The credentialism literature speaks of rewards for earned degrees, even when they are only marginally associated with productivity. Such behavior is difficult to understand when a performance record is available for a worker, but in the absence of productivity information a manager may have good reason to be conservative. Hiring and advancement decisions involve training costs, and the dismissal of an unsatisfactory employee can be difficult and expensive. A cautious manager might choose to protect himself, in this circumstance, by advancing workers for whom credentials are available, so that he would be able to justify his decision in the case of a poor selection (Merton 1957, pp. 149–87;

Thurow 1975, pp. 170–77).<sup>4</sup> Under this thesis, credentials, initially, would be overrewarded, but the effect would decline with tenure, as performance data became available and replaced earned degrees as a basis for personnel decisions.

This latter formulation of credentialism—a variant of the “signal thesis”—can be distinguished from the skill-acquisition (or ability-sorting) explanation of credential effects in the following manner: under credentialism, net of years of study, we should find a positive effect for an earned degree and a negative effect for the interaction of the degree with seniority, indicating atrophy of the credential with time. Under the skill-acquisition explanation we should find an earned degree effect, but no significant interaction with seniority.

### College Quality

Weisbrod and Karpoff (1968) and Wales (1973) reported a positive association between college quality and earnings; Wise (1973*a*; 1973*b*) found that college quality (measured by selectivity) is a strong predictor of both salary increase and promotion. In none of these studies was the effect examined by organizational rank. In line with our comments regarding years of schooling, we expect institutional quality to have its greatest impact in the salary grades in which college study contributes to job performance—presumably, the middle and senior ranks.

College quality has been interpreted as an indicator of the richness of the educational experience—“persons from better schools learn more than those in poorer schools, so their accrued academic knowledge is greater” (Wise 1973*a*, p. 363). On the other hand, quality schools probably attract more-able pupils (Addison and Siebert 1979, p. 135). In the absence of ability measures either contention—additional learning or heterogeneity—would produce a positive effect of college quality on promotion, an effect that would not erode with seniority.

College quality, however, could also be used by an employer, along with credentials, to screen new hires in a situation where few measures of productivity are available. If college quality were utilized in this way, as a “signal,” then, following the formulation in the preceding section, a positive effect should be noted for new hires, but one that atrophies with seniority as direct measures of performance become available (i.e., negative interaction between school quality and seniority).

<sup>4</sup> Lester Thurow suggests that even if employers correctly assess the productivity differential associated with a signal, because of the zero-one nature of hiring and promotion decisions the preferred group will be overselected (1975, pp. 172–75). See Bielby and Baron (1986, p. 792) regarding other reasons for employers’ misperception and misevaluation of workers’ ability.



### College Major

In an analysis of the determinants of salary growth in "a large manufacturing corporation," Wise (1973a) reported information for three categories of college major. Controlling for other features of an individual's education record, he found a substantial positive impact for a science/engineering major, a smaller effect for a liberal arts major, and the lowest efficacy for a business major.

Certainly the industrial specialty of a company is one determinant of the relevance of different college majors for advancement. However, we expect, in addition, a more or less universal association, across firms, between grade level and the returns to college major. In particular, in the middle ranks of a corporate bureaucracy, where the *details* of company policy are elaborated and their consequences extrapolated, employees who have concentrated in analytic fields—mathematics and the sciences—should be superior workers. In the highest corporate ranks the dominant activities are policy formulation, negotiation with external actors, and alliance building. A background in humanities or the social sciences would appear beneficial for these tasks.<sup>5</sup>

College major may also predict promotion because it is correlated with ability, broadly conceived, and we lack a measure of this construct. Thus, national Scholastic Aptitude Test (SAT) scores are highest for science and math majors, lower for social science majors, and still lower for students in education and business (College Board 1988, p. 8). However, if college major merely serves as a proxy for unmeasured ability, the major effects should not vary over the salary grades, as general ability—distinguished from specialized skills—should be universally valued. Finally, if college major is used by the firm to screen for prospective performance, then, following the signal argument outlined earlier, we should observe a decline with seniority in the effects of the major terms (i.e., negative interactions with seniority).

### III. DATA AND METHODS

The data for this study were taken from the personnel records of a large insurance company with headquarters in the northeast. During the 1970s the company employed approximately 16,000 individuals at any given time. The information made available to us covers job histories within the company of all workers who either were employed as of year-end 1970 or entered employment between 1971 and 1978.

<sup>5</sup> Collins (1979, p. 32) makes a similar observation: "Specialized or technical skills are considered to be of minor importance, at least above the level of lower supervisory jobs."

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The company is hierarchically organized into salary grade levels (SGLs), from grade 1 (lowest) to grade 20 (highest). Above grade 20 are the vice presidential ranks, which are not part of the study (though promotion from grade 20 is included). The hierarchy is explicit in written documents, is clearly perceived by the employees, and provides the basis for the firm's definition of promotion—a grade increase. Aside from a small number of maintenance and craft workers (not included), the employees are white collar and are not unionized.

We analyze the rate of promotion for each of six groupings of salary grade levels (SGLs 1–3, 4–5, 6–7, 8–10, 11–14, 15–20). The clustering of multiple grades in the two highest categories results from the small number of employees in those ranks, given the pyramidal shape of the company. The regressions discussed below are based on a 30% random sample of workers in the two lowest SGL categories; on 50% and 70% samples, respectively, in the next two categories, and on all employees in the two highest grade level groupings.

Promotions are investigated by means of a continuous-time transition rate model (Tuma and Hannan 1984). In particular, let the rate of advancement from grade  $i$ , after duration  $t$  in the grade, be

$$h_{i,i+1}(t|\mathbf{z}) = \lim_{\Delta t \downarrow 0} P_i[t \leq T < t + \Delta t | T \geq t; \mathbf{z}] / \Delta t, \quad (1)$$

where  $T$  is a random variable denoting months in grade  $i$ ,  $\mathbf{z}$  is a vector of covariates, and  $P[\cdot]$  denotes a probability. Departures from the organization, demotions, and incomplete intervals were treated as censored observations.

Regarding the shape of the hazard (1), a Gompertz specification was used,<sup>6</sup>

$$h_{i,i+1}(t|\mathbf{z}, \mathbf{x}) = \exp(at + \mathbf{b}'\mathbf{z} + \mathbf{c}'\mathbf{x}), \quad (2)$$

in which  $\mathbf{z}$  is a vector of control variables, and  $\mathbf{x}$  is a vector of covariates of interest—the education measures. The vector of controls contained the following terms: race (a set of four dummies), sex, age, seniority, and one or more grade-level dummies to correct for additive differences (in the exponent) in the effects of individual grades within an SGL category. To conserve space, only the coefficients of interest, for the education variables, are reported in the tables of regression equations.

The employee data base contains the following education information: (a) a set of 10 categorical variables that convey level of academic attain-

<sup>6</sup> As a test of the sensitivity to this assumption, several regressions were also run with a log logistic specification; they show little difference in covariate effects from the values reported in the tables.

ment,<sup>7</sup> (b) the name of the school from which the bachelor's degree was earned, and (c) the college major. Several measures were constructed from these data.

### Years of Schooling

In a few analyses, dummy variables, constructed from the categorical terms, were introduced directly into a regression; more often, a continuous formulation of years of schooling (EDUC) was used, which was created from the categorical terms. The assignment followed in defining EDUC is a fairly standard one: "high school graduate" was given the value "12," "junior college degree" was coded "14," "bachelor's degree" was assigned "16," and so on. In a few cases somewhat arbitrary assumptions were made: for example, "less than four years of high school" was assigned the value "10," "college courses, but less than 60 credits" was assigned "13."

### Credentials

The 10 categorical variables are explicit with respect to highest earned degree and were the source of three credential dummies: business/secretarial graduate (B/S), junior college graduate (JC), and master's degree (MA). In the analysis of credential effects our strategy was to introduce the three dummies together with variables for years of schooling (EDUC) and the square of this term. The dummies, then, convey the impact of credentials, net of the effect of length of study.

There is no dummy for bachelor's degree. Since the source of both the credential terms and EDUC are the 10 categorical variables, each credential is necessarily associated with a particular length of schooling. The consequence of including a credential dummy in the preceding formulation is to remove its years-of-schooling value from the estimation of the EDUC and (EDUC)<sup>2</sup> coefficients. This is not a difficulty as long as a substantial number of observations remain, especially at the extremes of EDUC, to accurately estimate the two slopes. In the present study the many instances of "high school graduate" serve to anchor the low end of EDUC, in the context of dummies for B/S and JC. At the upper end, however, the inclusion of dummies for both bachelor's and master's degrees would have presented a problem.

<sup>7</sup> The categorical variables are: *E0* = less than four years of high school; *E1* = high school graduate; *E2* = high school plus secretarial/business school; *E3* = less than 60 college credits; *E4* = more than 60 college credits; *E5* = junior college degree; *E6* = BA degree; *E7* = some graduate study; *E8* = master's degree; *E9* = doctorate.

### Institutional Quality

Selectivity was coded from Barron's (1980) *Profile of American Colleges*. In this volume, undergraduate-degree-granting schools are assigned to one of six categories on the basis of the difficulty of securing admission. A single variable was constructed from these ordered categories, with values ranging from one ("non-competitive") to six ("most competitive"). The few schools not listed in Barron's were assigned the value zero on the grounds that they are too minor to be included in the volume, even in the noncompetitive category.

Employees were assigned the selectivity score appropriate to their institution; workers who did not attend college were assigned the value zero. The selectivity measure was entered in a regression model together with a second variable, a dummy term (NO COLLEGE), coded "0" if the employee went to college and "1" otherwise. The resulting expression in the exponent of equation (2),

$$b_1(\text{NO COLLEGE}) + b_2(\text{SELECTIVITY}), \quad (3)$$

produces the following effect coding:  $b_2$  (SELECTIVITY) if the employee attended college and  $b_1$  otherwise.

### College Major

Four dummy variables were created to summarize a variety of fields of study: social science/humanities, business/insurance, math/science/engineering, and a residual category, NO COLLEGE. The last term also includes a very few employees who attended college but for whom a major was not reported.

Means for the controls and the education variables are reported in table 1. There are few surprises in this material, and we note only the principal patterns. Turning to the controls, duration in a grade rises with rank, but the differences are not large. With respect to race, the representation of blacks and Hispanics declines sharply over the grades; their percentages in the highest SGL category are less than one-tenth their rates in the lowest grades. The gender effect is similar: percentage female declines from 91% in the lowest SGL category to 8.5% in the highest corporate ranks.

The education variables also reveal expected patterns. Years of schooling (EDUC) increases over the grades, as does the proportion of employees holding a master's degree. In contrast, there is a decline in the proportions with B/S and JC as their highest credential. The college selectivity variable reported in the table is adjusted to reflect only employees who attended college. This measure fails to reveal any trend over the grades

TABLE 1  
MEANS OF VARIABLES, BY SALARY GRADE LEVEL (SGL) CATEGORY\*

| VARIABLES          | ALL<br>GRADES | SGL   |       |       |       |       |       |  |
|--------------------|---------------|-------|-------|-------|-------|-------|-------|--|
|                    |               | 1-3   | 4-5   | 6-7   | 8-10  | 11-14 | 15-20 |  |
| Duration in grade† | 21.78         | 17.83 | 23.71 | 25.18 | 24.43 | 22.76 | 24.12 |  |
| Promoted‡          | .227          | .247  | .196  | .207  | .253  | .240  | .214  |  |
| Race:              |               |       |       |       |       |       |       |  |
| White§             | .793          | .664  | .760  | .805  | .888  | .939  | .974  |  |
| Black              | .138          | .236  | .156  | .127  | .070  | .037  | .014  |  |
| Asian              | .013          | .012  | .020  | .016  | .013  | .009  | .005  |  |
| Hispanic           | .055          | .088  | .064  | .052  | .029  | .015  | .007  |  |
| Gender:            |               |       |       |       |       |       |       |  |
| Female             | .696          | .912  | .885  | .746  | .415  | .203  | .085  |  |
| Time:              |               |       |       |       |       |       |       |  |
| Age (years)        | 32.9          | 27.0  | 32.8  | 34.8  | 36.3  | 39.1  | 42.9  |  |
| Seniority (months) | 87.8          | 22.6  | 65.0  | 115.4 | 152.1 | 177.7 | 203.5 |  |
| Education:         |               |       |       |       |       |       |       |  |
| EDUC (years)       | 13.4          | 12.4  | 12.9  | 13.1  | 14.0  | 15.0  | 15.9  |  |
| B/S                | .099          | .136  | .127  | .102  | .059  | .020  | .012  |  |

|  |        |        |        |        |        |        |       |
|--|--------|--------|--------|--------|--------|--------|-------|
| JC .....                                     | .029   | .026   | .041   | .033   | .021   | .014   | .005  |
| MA .....                                     | .027   | .001   | .006   | .012   | .048   | .095   | .143  |
| SELECTIVITY <sup>†</sup> .....               | 3.33   | 5.75   | 3.19   | 3.56   | 3.37   | 3.53   | 3.48  |
| NO COLLEGE <sup>#</sup> .....                | .772   | .964   | .867   | .823   | .623   | .420   | .210  |
| College major:                               |        |        |        |        |        |        |       |
| Social science/humanities <sup>§</sup> ..... | .090   | .021   | .074   | .083   | .154   | .208   | .241  |
| Business/insurance .....                     | .082   | .003   | .015   | .040   | .128   | .267   | .419  |
| Math/science/engineering .....               | .027   | .001   | .006   | .022   | .062   | .074   | .103  |
| NO COLLEGE <sup>#</sup> .....                | .802   | .976   | .905   | .855   | .657   | .452   | .238  |
| N (spells) .....                             | 30,718 | 15,091 | 10,755 | 10,571 | 14,065 | 15,365 | 9,038 |
| No. of Employees .....                       | 8,966  | 5,984  | 3,032  | 3,042  | 3,368  | 2,142  | 1,740 |
| Sample fraction** .....                      | .20    | .30    | .30    | .50    | .70    | 1.00   | 1.00  |

\* Means are averages over spells. The averages over employees are similar.

† This is the mean number of months in a grade, including censored observations.

‡ This is the proportion of spells that end in a promotion.

§ This term from the variable category is omitted in the regressions.

# The selectivity measure is an average over employees who attended college.

\*\* Small differences in the two versions of this dummy term are due to patterns of missing data in the two sets of variables.

\*\* The fraction of employees from the grade category that is included in the analysis.

in college quality; the one anomaly, the high score in the lowest SGL category, should be discounted as it is based on a small number of cases. The distribution of college majors, by salary grade, is more interesting and shows an increase in business/insurance and math/science/engineering specialties, relative to social science/humanities, as one moves up the corporate ranks.

#### IV. FULL SAMPLE RESULTS

In table 2 we report findings from the analysis of a representative 20% sample of employees from all grade levels. The education terms in each column were estimated via a model of the form (2), in which controls were present for gender, race, age, seniority, and SGL level.

What we observe in table 2 are the following: (a) a strong tendency for promotion to be associated with years of schooling (col. 1), the effect being linear in the exponent (note the insignificance of  $EDUC^2$  in col. 2); (b) a credential effect, but only for business/secretarial graduate, with a *negative* influence on promotion (cols. 3, 4); and (c) rather clear evidence of promotion being associated with college selectivity and with a math/science/engineering major (cols. 5, 6). The final three columns fail to reveal any significant interactions with seniority.

The returns to years of schooling, college selectivity, and math/science/engineering major are consistent with results reported by others (e.g., Wales 1973; Wise 1975*b*; Pfeffer 1981, pp. 347–52). The credential effects are more surprising, in regard to both the negative sign of the significant B/S dummy and the failure to find a contribution from an advanced degree. Also noteworthy is the lack of evidence for a “signal” thesis, at least in its present formulation.

Before commenting on the credential effects it should be noted that they are not a result of constraining the years-of-schooling variable to be linear. Equations (3) and (4) reveal virtually identical results, whether the credential coefficients are measured as deviations from a linear or a quadratic function of  $EDUC$ . Nor is the negative B/S finding a consequence of an incorrect assignment of years-of-schooling to this degree. Equation (3) was reestimated, with the business/secretarial degree varied between 12 and 13 years, without the negative effect being altered appreciably.

This negative credential is consistent with two explanations: (1) self-selection by high school graduates with limited ability or modest ambition into a secretarial/business training program, in which case, in the absence of ability or ambition measures, the B/S term would serve as a proxy for these variables; or (2) a learning process, in which the credential measures skill acquisition associated with completion of the training program.

TABLE 2

## EFFECT OF THE EDUCATION VARIABLES ON THE PROMOTION RATE, ALL SALARY GRADES

| VARIABLES                                  | MODEL  |        |         |         |        |        |         |         |         |
|--|--------|--------|---------|---------|--------|--------|---------|---------|---------|
|  | (1)    | (2)    | (3)     | (4)     | (5)    | (6)    | (7)     | (8)     | (9)     |
| EDUC (years) .....                         | .045** | -.044  | .045**  | .179    | .027*  | .028** | .179    | .027*   | .029**  |
| EDUC <sup>2</sup> .....                    |        | .0032  |         | -.0048  |        |        | -.0047  |         |         |
| B/S .....                                  |        |        | -.148** | -.159** |        |        | -.244** |         |         |
| JC .....                                   |        |        | .059    | .040    |        |        | -.022   |         |         |
| MA .....                                   |        |        | .003    | -.034   |        |        | -.026   |         |         |
| SELECTIVITY .....                          |        |        |         |         | .030** |        |         | .041**  |         |
| NO COLLEGE .....                           |        |        |         |         | -.036  |        |         | -.036   |         |
| Business/insurance .....                   |        |        |         |         |        | .099   |         |         | .132    |
| Math/science/engineering .....             |        |        |         |         |        | .269** |         |         | .281**  |
| NO COLLEGE .....                           |        |        |         |         |        | -.044  |         |         | -.044   |
| B/S × seniority .....                      |        |        |         |         |        |        | .00025  |         |         |
| JC × seniority .....                       |        |        |         |         |        |        | .00128  |         |         |
| MA × seniority .....                       |        |        |         |         |        |        | -.00012 |         |         |
| SELECT × seniority .....                   |        |        |         |         |        |        |         | -.00011 |         |
| Business/insurance × seniority .....       |        |        |         |         |        |        |         |         | -.00028 |
| Math/science/engineering × seniority ..... |        |        |         |         |        |        |         |         | -.00016 |
| Duration <sup>a</sup> .....                | .015** | .015** | .015**  | .015**  | .015** | .015** | .015**  | .015**  | .015**  |
| χ <sup>2</sup> .....                       | 1,137  | 1,139  | 1,149   | 1,151   | 1,146  | 1,156  | 1,153   | 1,147   | 1,157   |

NOTE.—Entries are understandardized regression coefficients. Each regression equation (column) contains controls for gender, race, age, seniority, and SGL level. See text and table 1 for details.  $N = 30,718$  spells. Estimation by RA TE program (Tuma 1979). B/S = business/secretarial graduate; JC = junior college graduate; MA = master's degree. SELECTIVITY is an index of college selectivity (Barron's 1980); business/insurance and math/science/engineering denote college majors (social science/humanities is the deleted major in the regressions).

<sup>a</sup> Gompertz-shape parameter.

\*  $P < .05$ .

\*\*  $P < .01$ .



Normally, with our data, we cannot distinguish between the two explanations. In the present case, however, we discount the learning thesis because it is difficult to associate a negative effect with "learning" and because, as noted, the coefficient remains negative even when the B/S credential is equated (in years of study) with the high school graduate level; that is, no credit given for time spent in post-high school training.

The preceding discussion was intended to provide summary information about the impact of the different educational features on occupational advancement, as well as to assess whether our results replicate the reports of researchers who have investigated other firms. Our findings appear to be typical of large corporate bureaucracies, enhancing our confidence in the generalizability of the results. We now turn to an analysis of the variation in educational effects over the salary grades.

#### V. RETURNS TO EDUCATIONAL ATTAINMENT, BY ORGANIZATIONAL RANK

##### Years of Schooling

What is the impact of length of study on advancement prospects? In part A of table 3 we report, by SGL category, regressions of the promotion hazard on EDUC; each model is of the form (2) and contains controls for gender, race, age, seniority, and detailed SGL. Here EDUC appears as a linear variable in the exponent of these equations. Quadratic functions of EDUC were also estimated; however, in no case was the quadratic term significant.

The returns to years of schooling, viewed across the SGL categories, describe a unimodal curve (top row). The returns are small in the lowest and highest grades, and peak in the middle ranks. One explanation for this curvilinear pattern was provided by personnel managers in the insurance company: in the lowest grades, they contend, promotions are largely scheduled and require little more than acceptable attendance and the meeting of minimum performance standards. Thus, differences in schooling among employees do not get expressed in the promotion rate. In the highest ranks, in comparison, it is leadership style, personality, and political alliances—rather than educational attainment—that determine advancement.<sup>8</sup> Only in the middle ranks, where bureaucratic competence

<sup>8</sup> In some instances loyalty is rewarded directly by appreciative superiors. More commonly, social linkages and appropriate personal characteristics facilitate job performance. (As a result, a manager could make promotion decisions on the basis of universalistic criteria—i.e., productivity—even though particularistic considerations underlie the performance differences.) In either case, the impact of schooling is lessened.

TABLE 3

EFFECT OF YEARS OF SCHOOLING ON THE RATE OF PROMOTION, BY SALARY GRADE LEVEL (SGL)

| VARIABLES                                   | SGL    |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|
|   | 1-3    | 4-5    | 6-7    | 8-10   | 11-14  | 15-20  |
| A. Years of Schooling—Continuous            |        |        |        |        |        |        |
| EDUC (years) .....                          | .028*  | .037** | .113** | .065** | .049** | .041** |
| Duration <sup>a</sup> .....                 | .024** | .013** | .014** | .017** | .018** | .018** |
| $\chi^2$ .....                              | 522    | 265    | 519    | 818    | 776    | 402    |
| <i>N</i> (spells) .....                     | 15,091 | 10,755 | 10,571 | 14,065 | 15,365 | 9,038  |
| B. Years of Schooling—Discrete <sup>b</sup> |        |        |        |        |        |        |
| <i>E1</i> .....                             | .201** |        |        |        |        |        |
| <i>E2</i> .....                             | .075   | -.142  |        |        |        |        |
| <i>E23</i> .....                            |        |        | .168** | .169** | -.047  | .081   |
| <i>E3</i> .....                             | .231** |        |        |        |        |        |
| <i>E45</i> .....                            | .202*  | .070   | .211** | .181** | .077   | .073   |
| <i>E6</i> .....                             |        | .090   | .472** | .311** | .108   | .108   |
| <i>E69</i> .....                            | .303** |        |        |        |        |        |
| <i>E79</i> .....                            |        | .242   | .746** | .413** | .285** | .279** |
| Duration <sup>a</sup> .....                 | .024** | .013** | .015** | .018** | .018** | .018** |
| $\chi^2$ .....                              | 534    | 277    | 529    | 826    | 786    | 408    |
| <i>N</i> (spells) .....                     | 15,091 | 10,755 | 10,571 | 14,065 | 15,365 | 9,038  |

NOTE.—Entries are unstandardized regression coefficients. Each regression (column in a panel) contains controls for gender, race, age, seniority, and detailed SGL. See text and table 1 for details. Estimation by RATE program (Tuma 1979). *E0* = less than high school; *E1* = high school graduate; *E2* = high school plus secretarial school; *E3* = less than 60 college credits; *E45* = junior college degree or more than 60 college credits; *E6* = bachelor's degree; *E79* = graduate study. Educational categories are combined in grades for which the individual *N*'s are small (e.g., *E01*, *E23*, *E69*).

<sup>a</sup> Comperz-shape parameter.

<sup>b</sup> Omitted term in regression for SGL 1-3 is *E0*; in other regressions *E01* is omitted.

\*  $P < .05$ .

\*\*  $P < .01$ .

and analytic skills are critical for carrying out the more or less routine supervisory and technical tasks, does length of study have a substantial impact on promotion. It is in these grades that employees are sorted, with respect to future advancement, on the basis of human capital measures.

The preceding account represents *management's* view of the reward structure. A somewhat different insight is obtained from an examination of part B, in which educational attainment is represented by a series of dummy terms. Ignoring, for the moment, the depressed value of *E2* in SGLs 1–3 and 4–5,<sup>9</sup> in four of the six SGL categories the shape of the promotion response to years of schooling is consistent with a step-function formulation. Further, the inflection point—the locus of maximum gain from additional schooling—increases over the ranks: in the lowest SGL category the distinction of importance is the shift from “less than high school” (*E0*) to “high school graduate” (*E1*); in the next grade category it is the shift from “some college” (*E3*) to “junior college/more than 60 credits” (*E45*) that is rewarded,<sup>10</sup> and in the two highest SGL categories only graduate training (*E79*) contributes to the promotion rate.

These results provide support for the contention that, at each organizational level, certain educational skills are critical to job performance, and it is principally the acquisition of these skills that is rewarded. Additional schooling that does not bring one up to the critical level for a grade does not appear to be translated into a corresponding increase in the promotion rate—the results for SGLs 11–14 and 15–20 are informative on this point. Correspondingly, additional study above the level at which the skills crucial for task performance are imparted also receives little recognition in the promotion rate—see SGLs 1–3 and 4–5.

The results for the middle SGL categories (6–7 and 8–10) reveal a different pattern. In the former the education effects are linear; in the latter the results are ambiguous. These promotion responses may reflect a situation in which years of schooling enhances job performance over the full range of the education variable. Alternatively, the observed results could derive from the fact that the occupational tasks are very heterogeneous; these grades contain the highest rungs of the clerical job ladders as well as the entry steps of the professional/administrative lines. As a consequence, the response patterns may represent *mixtures* of more basic step-functions for the component jobs.<sup>11</sup>

<sup>9</sup> The term *E2* denotes “high school graduate plus secretarial/business school.” In the next section we argue that this kind of postsecondary training is associated with a negative credential effect, one that is superimposed on the returns to years of schooling. This result is also apparent from models (3) and (4) of table 2.

<sup>10</sup> We attribute the fluctuations in the terms following *E45*, in SGL 4–5, to the relatively small numbers of college graduates and postgraduates in low salary grades.

<sup>11</sup> Some evidence for a mixture interpretation was obtained by allocating employees

## Educational Attainment and Job Promotion

In regard to promotion, then, the evidence is fairly clear that the returns to schooling vary with organizational rank. Use of a single linear variable suggests that the impact of an additional year is greatest in the middle salary grades. However, when schooling is represented by a series of dummy terms, a more refined explanation is suggested, one in which a particular length of study is seen as critical to job performance (and advancement) in each salary grade. Thus, in low ranks, where clerical and secretarial tasks predominate, the crucial skills involve a facility with basic arithmetic and acquaintance with English language rules—for which high school completion and, perhaps, some college would suffice. In the highest grades of the company, in comparison, the critical skills involve mastery of subjects such as marketing, investment, and actuarial science, and it is therefore advanced academic training that is rewarded.

### Credential Effects

Six credentials are recorded in the employee data base: high school graduate, business/secretarial school graduate, junior college degree, bachelor's degree, master's degree, and doctorate. The effect of a doctoral degree was not investigated, as the number of employees with this degree is very small. Also, for reasons noted earlier, dummy terms were not defined for high school graduates or recipients of the bachelor's degree. This analysis, therefore, is restricted to the contributions of three levels of certification: business/secretarial graduate, junior college degree, and master's degree.

By "credential effects" we refer to the impact of earned degrees on the promotion rate, *net* of the returns to years of schooling. In part A of table 4 we report, for each of the six SGL groupings, the results from a hazard formulation (eq. 2), with variables present for EDUC, (EDUC)<sup>2</sup>, the credential terms, and the aforementioned controls. Even though (EDUC)<sup>2</sup> is highly correlated with EDUC, the quadratic term is introduced so that the credential dummies are measured as deviations from a years-of-schooling function which is not constrained to be linear (in the exponent).<sup>12</sup>

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in the middle SGL categories between clerical and administrative lines of work. In SGL 6–7, for example, the clerical lines have the dummy effects .053, .124, .402\*, .540\* for E23–E79, respectively (\* $P < .01$ ); in short, there is little impact of education before level E6.

<sup>12</sup> Without (EDUC)<sup>2</sup> present, the variable EDUC is significant and has values that approximate those given in pt. A of table 3. The credential terms from a linear formulation of EDUC show effects that are similar to, but somewhat stronger than, the ones reported in table 4. The quadratic expression in the text is the more conservative formulation for estimating the magnitude of the credential terms.

TABLE 4

## EFFECT OF CREDENTIALS ON THE PROMOTION RATE, BY SALARY GRADE LEVEL (SGL)

| VARIABLES <sup>b</sup>       | SGL                            |                    |        |        |        |                    |
|------------------------------|--------------------------------|--------------------|--------|--------|--------|--------------------|
|                              | 1-3                            | 4-5                | 6-7    | 8-10   | 11-14  | 15-20              |
|                              | A. Credentials                 |                    |        |        |        |                    |
| EDUC (years) .....           | .285                           | .284               | -.053  | .204   | .074   | -.022              |
| EDUC <sup>2</sup> .....      | -.0094                         | -.0090             | .0059  | -.0048 | -.0015 | .0015              |
| B/S .....                    | -.286**                        | -.337*             | -.220  | -.148  | -.351* | -.168              |
| JC .....                     | -.045                          | .143               | .058   | -.009  | .055   | . . . <sup>b</sup> |
| MA .....                     | . . . <sup>b</sup>             | . . . <sup>b</sup> | .028   | -.095  | .212** | .204*              |
| Duration <sup>a</sup> .....  | .024**                         | .013**             | .014** | .017** | .018** | .018**             |
| $\chi^2$ .....               | 532                            | 276                | 521    | 820    | 797    | 410                |
| N (spells) .....             | 15,091                         | 10,755             | 10,571 | 14,065 | 15,365 | 9,038              |
|                              | B. Interactions with Seniority |                    |        |        |        |                    |
| EDUC (years) .....           | .278                           | .293               | -.070  | .198   | .076   | -.020              |
| EDUC <sup>2</sup> .....      | -.0092                         | -.0093             | .0063  | -.0046 | -.0016 | .0015              |
| B/S .....                    | -.361**                        | -.306              | -.219  | -.301  | -.743* | -.118              |
| JC .....                     | -.047                          | .143               | .054   | -.010  | .057   | . . . <sup>b</sup> |
| MA .....                     | . . . <sup>b</sup>             | . . . <sup>b</sup> | -.035  | -.031  | .277** | .243*              |
| B/S $\times$ seniority ..... | .0033*                         | -.0004             | .0015* | .0008  | .0016  | -.0002             |
| MA $\times$ seniority .....  | . . . <sup>b</sup>             | . . . <sup>b</sup> | .0034  | -.0010 | -.0007 | -.0003             |
| Duration <sup>a</sup> .....  | .024**                         | .013**             | .015** | .018** | .018** | .018**             |
| $\chi^2$ .....               | 537                            | 277                | 527    | 823    | 801    | 410                |
| N (spells) .....             | 15,091                         | 10,755             | 10,571 | 14,065 | 15,365 | 9,038              |

NOTE.—Entries are unstandardized regression coefficients. Each regression (column in a panel) contains controls for gender, race, age, seniority, and detailed SGL. See text and table 1 for details. Estimation by RATE program (Tuma 1979). B/S = business/secretarial school graduate; JC = junior college graduate; MA = master's degree.

<sup>a</sup> Gompertz-shape parameter.

<sup>b</sup> Dummy term omitted; fewer than 1% of workers in the SGL category held the credential.

\*  $P < .05$ .

\*\*  $P < .01$ .

## Educational Attainment and Job Promotion

We observe, in table 4, part A, consistent negative returns across the salary grades to business/secretarial study; the effects are significant in the two lowest grade categories and in SGL 11–14. Completion of a master's degree is rare in the lowest salary grades (less than 1% of observations); a dummy term for this credential was therefore omitted. In the middle SGL categories the returns to master's degree are small and insignificant; in the two highest salary grade categories, however, the coefficient for a master's is positive and significant. The junior college term is fairly small in magnitude and insignificant in all grades.

With one exception the business/secretarial term is significant only in the lowest SGL categories, and the MA term only in the highest salary grades. One is tempted to interpret these results as supporting a thesis of reward allocation by firms for the academic degree most relevant to job performance in the particular rank; in short, a formulation that parallels the conclusions reached with the years-of-schooling dummies. Yet the results for the two credentials are really quite different. The MA effects support this contention—the dummy variables are small except in the grades in which the skills associated with advanced academic training would be useful. The B/S term, however, is negative and substantial in *all* salary grades; its insignificance in the higher SGLs is probably due to the rarity of this credential in senior ranks rather than to a lessening of effect on the promotion rate.

Now, there is no reason to expect the different credentials we investigate to all have the same consequence for advancement, and there is no necessity, therefore, for performing a universal test of a “credential effect.” An employer might use some degrees as “signals,” while discounting others; some credentials may provide skills specific to task performance in certain jobs and in the associated grades, while others are diffuse in their impact (Spence 1973, p. 359). In line with this reasoning, in the analysis of interaction effects (table 4, pt. B), our strategy is to examine separately the pattern for each degree.<sup>13</sup>

With respect to a master's degree, the interaction with seniority is never significant. This suggests that its impact on the promotion rate does not atrophy with length of service; there is no evidence for “credentialism,” in the sense of a signal invested with elevated significance in the absence of performance measures. Rather, a master's degree increases one's promotion prospects *independent of employment duration*. The further result (from pt. A) that the MA effect operates only in the highest

<sup>13</sup> The junior college effects were small in all our test runs and the interactions with seniority were never significant. As a result, the interaction terms were omitted in the final regressions.

salary grades reinforces our earlier assessment, from table 3, that it is academic training relevant to job performance which is being rewarded.

In comparison, the interactions of the B/S terms with seniority are contradictory. In SGLs 1–3 and 6–7 the positive interactions support a “credentialism” interpretation: In the absence of performance measures, employers act as if it is individuals with modest ability, or low career aspirations, who undertake this training; in short, the credential is disvalued. With the passage of time, the impact of the credential is mitigated (positive interaction with seniority) as performance data become available. In other SGLs, however, the interaction term is insignificant, suggesting that while this degree may be correlated with (omitted) determinants of performance, the degree itself is not treated by employers as a signal.

Rather than propose different explanations by salary grade level, we restrict our assessment concerning the B/S degree to the consistent results with the additive terms (table 4, pt. A). From this material, it is evident that a B/S credential has a negative effect, one that is universal across salary grades. Whether the depressed promotion rate is a result of self-selection into secretarial training by workers of modest ability (no interaction) or whether employers initially stigmatize workers having this educational background (positive interaction) remains unclear.

To summarize, academic degrees do have an effect, net of years of schooling, but the evidence for “credentialism”—as the thesis is formulated in this paper—is modest. Rather, we find that a master’s degree increases the rate of promotion in the higher salary grades, where the skills associated with this degree can enhance work performance. A business/secretarial certificate influences the advancement rate for a different reason; either in fact or in the stereotypical views of employers, it is associated with weak job performance or low career aspirations.<sup>14</sup>

### College Quality

Wise (1975*b*) reported a positive effect of college selectivity on the promotion rate. Our results, using the full sample (col. 5 of table 2), corroborate

<sup>14</sup> To be certain that our results are not an artifact of the coding scheme, we performed the following sensitivity analyses: We varied the EDUC value for B/S from 12 to 13 years, which corresponds to an average length of secretarial study of zero to one year. We also varied the length of study assigned to the master’s degree from one to two years. The results from these assignments differed only modestly from the values presented in the text and did not alter the thrust of our assessment.

his findings. We also noted the absence of an interaction with seniority (col. 8), which suggests that college quality is not used by employers as a "signal" regarding expected productivity.

The motivation for examining the impact of college quality by organizational rank derives from the conclusions to the preceding sections. In particular, we have observed that both years of schooling (EDUC) and a master's degree have effects that vary by salary grade, and that the pattern of these effects conforms to a formulation in which employers reward educational attainment that is consistent with work requirements in a particular rank. Now, college quality does not tap *level* of academic attainment. Nonetheless, it seems reasonable to postulate that in the jobs (and grades) in which college training contributes valued skills, graduation from an institution of superior standing would signify an enriched education. For this reason, we expect college selectivity—our indicator of quality—to predict promotion, especially in the middle and senior organizational ranks.

In table 5 we report hazard regressions, with the variables of interest coded in accordance with the formulation of equation (3). The results in part A provide only modest support for our contention. Selectivity, indeed, is positive and significant in grades 8–10 and 11–14. However, the magnitude of the selectivity coefficient is equally large in lower SGLs, raising the possibility of insignificance in those ranks only because of the paucity of employees with college training. Further, there is no evidence of a selectivity effect in the highest SGL category.

Part B is revealing about this ambiguity. Here the selectivity effects are significant and substantial in grades 6–7 through 11–14. Further, the interactions with seniority are also significant—and negative—in the three SGL categories. These findings suggest that college selectivity is used as a "quality signal" by employers in regard to the expected performance of recent hires (Pfeffer 1981, p. 352), much as has been argued with respect to earned credentials. The quality signal is utilized in initial promotion decisions, in the middle organizational ranks, where college training would provide relevant job skills. The interaction effect in the highest SGLs, though not significant, is consistent with this argument; the insignificance probably reflects the small number of individuals hired directly into the senior ranks.

In summary, in regard to college quality, we find considerable evidence in support of a "signal" thesis, with a further indication that the signal is activated, principally, in the middle grades. The absence of a significant interaction in the representative sample of company employees (col. 8 of table 2) is misleading with respect to the true role of college quality in promotion decisions and can be attributed to the large proportion of the



TABLE 5

## EFFECT OF COLLEGE SELECTIVITY ON THE PROMOTION RATE, BY SALARY GRADE LEVEL (SGL)

| VARIABLES                            | SGL     |        |           |           |          |         |
|--------------------------------------|---------|--------|-----------|-----------|----------|---------|
|                                      | 1-3     | 4-5    | 6-7       | 8-10      | 11-14    | 15-20   |
| A. Selectivity Effects               |         |        |           |           |          |         |
| EDUC (years) .....                   | .015    | .054** | .073**    | .044*     | .041*    | .049*   |
| SELECTIVITY <sup>a</sup> .....       | .038    | .033   | .025      | .026*     | .029**   | -.006   |
| NO COLLEGE .....                     | -.018   | .165   | -.150     | -.045     | .020     | .038    |
| Duration <sup>b</sup> .....          | .024**  | .013** | .014**    | .017**    | .018**   | .018**  |
| $\chi^2$ .....                       | 525     | 270    | 523       | 823       | 784      | 402     |
| N (spells) .....                     | 15,091  | 10,755 | 10,571    | 14,065    | 15,365   | 9,038   |
| B. Interactions with Seniority       |         |        |           |           |          |         |
| EDUC (years) .....                   | .016    | .051** | .085**    | .053**    | .044**   | .050**  |
| SELECTIVITY <sup>a</sup> .....       | .042    | .011   | .098**    | .058**    | .054**   | .018    |
| NO COLLEGE .....                     | -.019   | .138   | -.090     | -.015     | .020     | .020    |
| SELECTIVITY $\times$ seniority ..... | -.00024 | .00053 | -.00104** | -.00031** | -.00016* | -.00014 |
| Duration <sup>b</sup> .....          | .024**  | .013** | .015**    | .018**    | .018**   | .018**  |
| $\chi^2$ .....                       | 525     | 271    | 551       | 833       | 788      | 404     |
| N (spells) .....                     | 15,091  | 10,755 | 10,571    | 14,065    | 15,365   | 9,038   |

NOTE.—Entries are unstandardized regression coefficients. Each regression (column in a panel) contains controls for gender, race, age, seniority, and detailed SGL. See text and table 1 for details. Estimation by RATE program (Tuma 1979).

<sup>a</sup> College SELECTIVITY was coded from Barron's (1980). See text for details.

<sup>b</sup> Gompertz-shape parameter.

\*  $P < .05$ .

\*\*  $P < .01$ .

work force engaged in low salary grades, where advanced study has little impact on job performance.

### College Major

Wise (1975*b*) reported a significant effect of a math/engineering major on the probability of promotion; our results with the representative sample of employees confirm his findings (col. 6 of table 2). Also, since the interactions with seniority (col. 9) are insignificant, a thesis to the effect that college major is used by employers as a "productivity signal" fails to find support, at least in its current formulation.

At the outset of the paper we suggested that college major might serve as a proxy for ability (unmeasured in our data base). This possibility is credible because a math/science concentration is, indeed, associated with high SAT scores (College Board 1988, p. 8). If this omitted variable thesis is correct, then a math/science major should have a positive effect on the rate of promotion *in all SGLs*, since general ability, presumably, would enhance work performance in every rank. An alternate possibility is that the math/science/engineering major contributes to productivity only in jobs that require advanced analytic skills—presumably positions in the middle organizational ranks (Pfeffer 1981, pp. 346–50). A third thesis is that some majors are used by an employer as "signals," relied upon as performance indicators for newly hired workers. Akin to the credentialism formulation, a significant interaction with seniority would constitute support for this contention.

The impact of field of study on the rate of promotion is addressed in table 6, in which survival regressions are reported. The reference category for the college major effects is social science/humanities; relative to this specialty there is a clear indication that a math/science/engineering concentration is advantageous, with respect to the promotion rate, in all salary grades except SGL 11–14 (pt. A).<sup>15</sup> The reason for the lack of effect in the latter grade category could not be ascertained.

The introduction of interaction terms between college major and seniority does not alter the findings with respect to a math/science/engineering concentration: in no case is the interaction term significant (table 6, pt. B). However, a significant interaction (negative) between business major and seniority does appear in the middle grades—SGLs 6–7 and 8–10. In conjunction with the positive main effects, this result suggests

<sup>15</sup> The effect of the NO COLLEGE term (positive and significant in SGL 15–20) has no evident substantive interpretation. The EDUC variable in these regressions controls for years of schooling; the dummy for no college is included to obtain a proper specification of the college major terms.

TABLE 6

## EFFECT OF COLLEGE MAJOR ON RATE OF PROMOTION, BY SALARY GRADE LEVEL (SGL)

| VARIABLES <sup>a</sup>                      | SGL              |                |         |          |        |        |
|---|------------------|----------------|---------|----------|--------|--------|
|   | 1-3 <sup>b</sup> | 4-5            | 6-7     | 8-10     | 11-14  | 15-20  |
| A. College Major Effects                    |                  |                |         |          |        |        |
| EDUC (years) .....                          | ...              | .050**         | .075**  | .034*    | .037** | .061** |
| Business/insurance .....                    | ...              | .139           | .141    | .032     | .009   | .137*  |
| Math/science/engineering .....              | ...              | . <sup>d</sup> | .336**  | .208**   | -.010  | .194*  |
| NO COLLEGE .....                            | ...              | .120           | -.130   | -.109    | -.058  | .226*  |
| Duration <sup>c</sup> .....                 | ...              | .013**         | .014**  | .017**   | .018** | .018** |
| $\chi^2$ .....                              | ...              | 267            | 534     | 834      | 778    | 412    |
| N (spells) .....                            | ...              | 10,755         | 10,571  | 14,065   | 15,365 | 9,038  |
| B. Interactions with Seniority              |                  |                |         |          |        |        |
| EDUC (years) .....                          | ...              | .052**         | .076**  | .039*    | .037** | .064** |
| Business/insurance .....                    | ...              | .334           | .278*   | .175*    | -.007  | .242*  |
| Math/science/engineering .....              | ...              | . <sup>d</sup> | .364**  | .221*    | -.062  | .176   |
| NO COLLEGE .....                            | ...              | .124           | -.132   | -.109    | -.055  | .220*  |
| Business/insurance $\times$ seniority ..... | ...              | -.0087         | -.0039* | -.0017** | .0001  | -.0006 |
| Math/engineering $\times$ seniority .....   | ...              | . <sup>d</sup> | -.0008  | -.0002   | .0005  | .0002  |
| Duration <sup>c</sup> .....                 | ...              | .013**         | .015**  | .018**   | .018** | .018** |
| $\chi^2$ .....                              | ...              | 270            | 540     | 845      | 778    | 414    |
| N (spells) .....                            | ...              | 10,755         | 10,571  | 14,065   | 15,365 | 9,038  |

NOTE.—Entries are unstandardized regression coefficients. Each regression (column in a panel) contains controls for gender, race, age, seniority, and detailed SGL. See text and table 1 for details. Estimation by RATE program (Tuma 1979).

<sup>a</sup> College major dummy "social science/humanities" is omitted.

<sup>b</sup> Model not computed; fewer than 1% of employees in the SGL were in any college major category.

<sup>c</sup> Gompertz-shape parameter.

<sup>d</sup> Dummy term omitted; fewer than 1% of employees in the SGL category had this major.

\*  $P < .05$ .

\*\*  $P < .01$ .

that the business major is invested with special significance by employers, relied upon as a "signal" of competence or commitment, in the absence of performance information.

With respect to college major we conclude that a math/science/engineering concentration does increase the rate of promotion, either because more-able students self-select into this specialty or because the associated skills are useful in insurance company jobs. Because a math/science/engineering major is rare in the two lowest grade categories, it is not possible to choose definitively between these explanations, such as by examining whether this specialty enhances the promotion rate in low ranks, where advanced mathematics would have little relevance for job performance. (Nonetheless, the broad range of grades in which a math/science/engineering concentration is significant speaks for ability sorting as the more likely explanation.) There is no indication that this major is accorded particular significance by employers (no interaction effect); a contrary conclusion, however, should be drawn with respect to a college major in business studies.

## VI. CONCLUSIONS AND IMPLICATIONS FOR THEORY ABOUT ATTAINMENT PROCESSES

The objective of this paper was to investigate the promotion returns to different educational features, giving special consideration to how the returns vary with position in an organization. With respect to an individual's educational biography, it is evident that each of the factors—years of schooling, earned degrees, college quality, and college major—bears some influence on advancement prospects.

The way in which these educational components contribute to the promotion rate is clarified once considerations of organizational rank are introduced. Indeed, the principal finding from this analysis is that employers reward schooling to the extent it is relevant to job performance; as a result, the particular educational features that predict to advancement vary with salary grade and, presumably, with other job characteristics as well.

Whether one views employers as rewarding educational attainment directly, or indirectly via its effect on job performance, it is not the case that scholastic attainment is compensated indiscriminately; with respect to promotion prospects, "more is not necessarily better." Rather, the greatest impact of education occurs at the point at which supplementary schooling is likely to convey job relevant skills. Additional study that is below the threshold for effectiveness in a work setting produces little impact on the promotion rate; schooling in excess of the educational requirements for a job appears to be treated by employers as superfluous.

Support for this assertion is evident with respect to years of study (pt. B of table 3), though much the same conclusion can be drawn from an evaluation of the master's credential and college quality.

### The Matching of Workers and Jobs

It would seem that these findings are at variance with the job matching literature. In that literature a dynamic formulation of career evolution is proposed in which the rate of job changing corresponds to the *discrepancy* between an individual's resources and a job's requirements—the rate is highest when the fit is poor and it slows down with age (or seniority), as experience with prior job tasks permits workers and employers to arrive at a suitable “match” (Jovanovic 1979; Mobley 1982, pp. 96–118; Sørensen 1977, 1982).<sup>16</sup> What we find, instead, is that the rate of promotion (job changing) is maximum when the fit between education and job requirements is best and lower when educational attainment is insufficient for effective task performance.

This apparent contradiction between the matching literature and our findings is resolved once we consider which actor—worker or employer—controls the job-change decision. *Termination of employment*, especially from large companies, is primarily at the initiative of the worker,<sup>17</sup> though firms are not without strategies for encouraging the departure of unwanted employees. In general, if a worker is displeased with the match, if he feels that his resources make him worthy of a better job, he will look elsewhere. With the passage of time the worker, presumably, succeeds in arriving at a suitable match—either because a more satisfying position has been found or because his appraisal of his own resources has been lowered—and the rate of job changing declines.

*Promotion*, however, represents a different kind of job change. This decision is made by the employer, not by a worker. It is based on a worker's productivity record; as such it is a reward for superior performance. What we find is that the rate of promotion peaks when there is a good match between a worker's educational background and the requirements of his current job, and it is lower when the match is poor. Sørensen (1977, p. 972) and Jovanovic (1979, p. 976), incidentally, make clear that their job matching formulations refer to the calculations of *workers*; from the perspective of an employer the intent is to motivate

<sup>16</sup> Sørensen (1977, p. 972) uses a slightly different formulation of career evolution; he bases the rate of mobility on the discrepancy between an individual's current attainment and potential attainment, given his or her resources.

<sup>17</sup> Aside from cyclical layoffs, dismissals are not common because of contractual and legally mandated due process procedures. At the insurance company, for example, 14% of terminations during 1971–78 were classified as “involuntary.”

and reward productivity, which is heightened, presumably, when the correspondence is optimal.

With regard to career dynamics, our results suggest the following strategic considerations for a worker: It is important to enter an organization at a rank in which one's educational attainment is not much above the norm for the grade, because superior education provides little return in promotion prospects. With advancement, at the point where one's educational qualifications fit the prerequisites for the job, one is advantaged with respect to less educated workers but not handicapped in reference to better-trained employees. With further promotion the worker begins to find himself at a disadvantage with respect to better-schooled employees, as the scope of job requirements is extended.

These results are reminiscent of the "Peter Principle"—the cliché which predicts that individuals will rise to the level of their incompetence. Stated more formally, we would say that individuals rise to the level at which their resources match a job's qualifications; after this point the rate of advancement begins to decline. Yet, this appraisal should be qualified for employees who have reached the highest salary grades of a company. From our results, and from reports of others (e.g., Kanter 1977, pp. 181–86; Pfeffer 1981, pp. 251–54), it appears that educational attainment has little impact on advancement *within* senior management ranks; considerations of sponsorship, networks, and alliances are more relevant factors.

### Specific Educational Features

Aside from these remarks about the dynamics of the advancement process, there are findings specific to particular educational components. Ignoring minor inconsistencies we would say that a secretarial credential and a math/science/engineering major have effects that are *invariant* of rank, while a master's degree influences the promotion rate only in grade levels in which advanced academic skills are likely to contribute to productivity.

This assessment is based on the additive effects of the different educational terms. Formally, in this instance, with our data, we cannot differentiate between an explanation that stresses ability sorting and one that emphasizes learning. In actuality, the secretarial effect is likely to arise from a selection process. Evidence for this assertion resides in the negative character of the credential (difficult to attribute to learning) and in the universality of its effect over the salary grades. We suspect that the math/science/engineering term also reflects an ability-sorting process—because of the lack of grade-level specificity—but the evidence here is far from conclusive. In comparison, the MA effect, which is specific to

the higher ranks, probably represents a learning process—the acquisition of skills necessary for productivity in these grades.

A final theme concerns the evidence for “credentialism”; more generally, for a “signal” hypothesis in which the signal is some educational feature that an employer chooses to invest with elevated significance. We find evidence that college quality and a business major function in this capacity. Moreover, each variable is credible as a signal in a context of uncertainty. College quality (or its correlate, prestige) has been cited as a factor upon which employers rely even when an association with productivity is not evident (Pfeffer 1981, p. 352). Similarly, a business major indicates commitment to the corporate world; one can imagine a preference for such workers when training investments have to be made and performance information is lacking.

Nonetheless, we hesitate to make much of the evidence for a signal thesis. First, the variables traditionally associated with credentialism—earned degrees—fail to exhibit the pattern associated with this mechanism. Second, we lack a theory that would suggest which educational features are likely to be accorded significance or how the salience of the different features might vary by firm or industry. In this circumstance, our results—that some educational features exhibit “signal” effects while others do not—remain little more than interesting empirical regularities. We are in a somewhat different situation with respect to the *additive* effects of math/science/engineering major, school quality, and business/secretarial study. The first two corroborate the reports of Wise (1975*b*) and Wales (1973); at least we are on surer empirical footing. The negative secretarial terms are credible because they are strong, consistent over the salary grades, and not counterintuitive.

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# Prejudice, Discrimination, and the Labor Market: Attainments of Immigrants in Australia<sup>1</sup>

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This article develops hypotheses about how prejudice can be expected to affect discrimination and tests them in Australia, a nation with numerous and diverse immigrants. Census data, analyzed with a flexible regression model, are from the 1981 1% Public Use Sample (PUS), with detailed information on education, occupation, income, timing of immigration, and language fluency. Attitudinal data, analyzed with LISREL methods, are from a representative national sample ( $N = 3,012$ ). The analyses show that the sociological hypothesis of prejudice leading to discrimination is both wrong (there is little or no discrimination in jobs and pay) and right (prejudiced employers say they would discriminate in hiring). Economists, too, are partly wrong (competition does not force employers to renounce discriminatory hiring) and partly right (minorities receive equal rewards to education with no sign of discrimination on a social distance gradient). The authors suggest that "exclusionary" and "economic" discrimination are fundamentally distinct and that, unless exclusionary discrimination is nearly universal, it does not imply economic discrimination.

## INTRODUCTION

A large sociological literature holds that prejudice leads to discrimination. In this view, employers' ethnic prejudices affect their decisions about

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hiring, promotion, and pay, so that they discriminate against immigrants according to a social-distance gradient. This raises fundamental questions about the rationality of labor markets, since the cold-blooded, profit-maximizing employers of neoclassical economics should weigh only potential profits and, therefore, consider only productivity in hiring decisions. How rational and profit maximizing are labor markets? How much social distance is required before enough employers are sufficiently prejudiced that discrimination leads to lower status and pay for migrants?

### Prejudice/Discrimination Theory

Ethnic prejudice is rife in many societies, often fueling political conflict and apparently causing discrimination (e.g., Burawoy 1976; Kelley and McAllister 1984a; Kelley 1988; Lewin-Epstein and Semyonov 1986). Immigrants are particularly vulnerable. In the typical modern migration to rich industrial nations from southern Europe and the Third World, migrants generally differ from the host population in language, ethnicity, religion, and education, so social distance is great. Moreover, immigrants are often politically weak: of diverse origins, divided among themselves, sometimes ineligible to vote. Thus they are likely targets for discrimination and are widely thought to suffer from it (e.g., Burawoy 1976; Piore 1980; Evans, Jones, and Kelley 1988).

The underlying theory is that employers' ethnic prejudice leads them to avoid hiring immigrants and sometimes their descendants (e.g., see Greeley [1978] on Irish immigrants in the 19th-century United States). A parallel argument holds that native workers are prejudiced and so resist working with immigrants (e.g., see Price [1963] on Greeks in the Australian mines). Such discrimination could push immigrants into a secondary labor market where rewards are meager and promotion opportunities limited (Bonacich 1979; Bowles and Gintis 1975). On this argument, it is rational for prejudiced people to discriminate. Full-time workers, for example, spend about one-third of their waking lives at work, so if they dislike immigrants, working with them extracts a real psychological cost. So even if it is costly, discrimination is still rational if people are willing to pay for their prejudices.

The prejudice/discrimination theory holds that discrimination reflects social distance, with the least prejudice against the nearest groups and the greatest prejudice against the furthest. Thus, if prejudice is intense enough to produce discrimination against one group, more distant groups will suffer even more: discrimination against a "further" group must always be equal to or greater than discrimination against a nearer group (Hodge 1973; Lewin-Epstein and Semyonov 1986; Massey 1981). The strongest version of the prejudice/discrimination theory is that discrimi-

nation begins at very short social distances, affecting even the most assimilated ethnics.

**HYPOTHESIS 1: ETHNIC MINORITIES.**—There is prejudice and discrimination against anyone, whether native born or immigrant, who differs from the dominant group in ethnic origin.

A less extreme version of the thesis omits discrimination against the most assimilated group, immigrants' native-born children—after all, they share many experiences with the majority group: growing up in the same country, attending the same schools, watching the same TV programs, and speaking with the same accent. In less extreme versions, discrimination sets in at progressively greater distances.

**HYPOTHESIS 2: IMMIGRANTS IN GENERAL.**—There is prejudice and discrimination against all immigrants, but not against the native born.

**HYPOTHESIS 3: IMMIGRANTS OF DIFFERENT CULTURE.**—There is prejudice and discrimination only against immigrants whose culture differs from that of the dominant group.

**HYPOTHESIS 4: IMMIGRANTS OF DIFFERENT RACE.**—There is prejudice and discrimination only against immigrants who differ from the dominant group in race or color as well as in culture.

### Competitive Market Theory

By contrast, neoclassical economic theory implies that discrimination cannot exist in advanced industrial societies' largely free and competitive labor markets (Becker [1957] 1971). If immigrants are paid less than natives with similar productivity, the profit motive provides a strong incentive for an employer to break ranks with discriminatory peers and profit by hiring inexpensive immigrants instead of expensive natives; he can pay immigrants less or, at the same wage, hire more highly skilled—and hence more profitable—immigrants. That raises the maverick firm's profits, while employers using native labor face higher costs. Competition will eventually force the market back into equilibrium, by reducing natives' wages, or increasing immigrants' wages, or both. Unless discrimination can be enforced on every single employer (e.g., by legislation, boycotts, or threat of violence), it cannot long endure in a competitive market, save in very special circumstances. Discrimination by workers or customers leads to the same result (Becker 1971; see also Cain 1976; Ehrenberg and Smith 1982, pp. 401–12).

**HYPOTHESIS 5: PRIMACY OF PROFIT.** In a competitive economy, employers cannot discriminate on the basis of ethnicity or other characteristics unrelated to economic productivity.

This theory does not imply that immigrants and natives will have equally good jobs or equally high incomes. Only if they were equally well

endowed with productive resources—preeminent among them education, language skills, and labor-force experience—would that be so.

## AUSTRALIA

Australia is a good place to test these theories because its immigrants are many, diverse, and recent. First, immigrants are numerous enough to be highly visible, perhaps threatening: fully 21% of the population are foreign born and a further 18% are immigrants' children. Most other developed countries, including the United States, have less than half as many immigrants, although Israel has more and Canada and Switzerland almost as many. Second, Australia's immigrants are diverse: some closely resemble the dominant Anglo-Celtic majority, but many others differ in language and culture, and some differ in race. Third, this ethnic diversity is recent, and it remains a politically charged issue. As late as 1947, barely 2% of the population was born outside Australia and the British Isles; the main waves of non-Anglo-Celtic migration began only after World War II and are still coming (Price 1986).

### Previous Research on Australia

In Australia as elsewhere, direct data on discrimination are rare, so the usual approach compares immigrants' and natives' occupation and income. This has the advantage of focusing sharply on the key outcomes. But such simple comparisons do not address the question of discrimination: that requires all relevant differences in economic resources to be taken into account. This is the main difficulty and the central issue in this tradition of research.

The most important difference between groups is in education: immigrants often have less than natives. If that were the only difference, it would be easy to adjust for. But beyond that is a crucial difficulty: the effects of a given amount of education may be smaller for immigrants than for natives. For example, Hirschman and Wong (1984, p. 602) report flatter returns for Asians and Hispanics in the United States, while, using a better measure of education, Neidert and Farley find flatter returns for foreign-born Southern Europeans and Mexicans, but not for Asians or European descent groups (1985, p. 844; see also Chiswick 1979).

In Australia, only immigrants from the Mediterranean region are at any clear disadvantage, net of education and other relevant characteristics (Broom et al. 1980, pp. 43–45, 91–93; Miller 1982), but there is continuing controversy over whether this reflects discrimination (Jones

1988).<sup>2</sup> Mediterranean immigrants with little education had better jobs and higher incomes than comparable natives (suggesting no blanket discrimination) but those with above-average education did substantially worse, possibly because their education was of lower quality (Kelley and McAllister 1984b). But previous analyses have not distinguished domestic and foreign education—crucial since quality is at issue—and most have measured education only crudely (Chiswick and Miller 1985).

### A New Model

Evaluating these educational differences is not easy. Quality differs among countries. For example, many Mediterranean immigrants came from small villages that had poor schools. Furthermore, some education imparts local knowledge (e.g., of history, institutions, and the economy) that is less valuable in a new country, and some advanced training is country specific, too (e.g., accounting, law). It is also important to distinguish foreign and domestic labor-force experience, since some skills and knowledge acquired abroad may have little value to employers in the new country. For these reasons, we examine three subgroups separately: those who were educated abroad, those who came to Australia as children and were educated in Australian schools, and the “second generation”—the Australian-born children of immigrants. The second generation’s schooling is identical to natives’, their work experience closely comparable, and their command of English good. Thus the best tests of the prejudice/discrimination hypotheses concern the second generation and immigrants who came to Australia as children. If they do worse than native-stock Australians, other things equal, there is a *prima facie* case for ethnic discrimination.

Our analysis extends previous research in several ways. (1) Taking advantage of the wide variety of immigrants in Australia—some with a social and cultural background virtually identical to that of the dominant population, others very distant from it—we provide a more precise test of the prejudice/discrimination hypothesis than is possible in societies with less varied immigration streams. (2) We explicitly take into account the timing of immigration, distinguishing childhood immigrants who were educated in Australia from those who came as adults after completing their education. Childhood migrants are particularly important because comparisons are not contaminated by difficulties in assessing the quality and content of education in different nations. (3) Our flexible

<sup>2</sup> Jones (1988) is available from the Office of Multicultural Affairs, Department of the Prime Minister and the Cabinet, Canberra, ACT 2600, Australia.

model introduces the crucial distinction between immigrants educated in Australia and those educated abroad, and distinguishes between labor-force experience in Australia and abroad. It also allows for curvilinear effects on all key variables and allows for slope differences between those immigrating as children and those immigrating as adults. (4) We analyze the 1% sample of individual records from the 1981 census, which provides a rare combination of very large sample size with fine-grained detail in measurement. Especially useful are the single-year data on timing of migration, which enables us accurately to differentiate foreign from Australian education and foreign from Australian labor-force experience. Moreover, it includes data on English-language skill, an important influence on immigrants' attainments (Evans 1987; Tienda and Neidert 1984), omission of which can seriously bias estimates of effects of education and experience.

## DATA

### Data on Attainments

The Public Use Sample of individual records from the 1981 Australian census provides the data, a large ( $N = 144,365$ ) random sample with very accurately measured variables.<sup>3</sup> Population coverage is nearly complete, and standards of data preparation are very high (Australian Bureau of Statistics 1983a).<sup>4</sup> Our analysis is restricted to men, ages 16–64, who have jobs: 23,420 native-stock men; 5,106 second-generation men; and 10,916 immigrants.

*Gender.*—We analyze only men because it is vital to control for labor-force experience (particularly in analyzing income). Experience can be reasonably approximated for men (as current age minus age at the end of education) but not for women. In Australia, women's labor-force participation is intermittent and differs greatly among immigrant groups (Evans 1984).

*Age.*—Many people leave school quite early in Australia: in 1981, 39% of all 16 year olds, 66% of 17 years olds, and 80% of 18 year olds. Our lower age limit of 16 reflects this tendency and so avoids confounding

<sup>3</sup> These data (available from the Social Science Data Archive, Australian National University, Canberra) are the best available for Australia because of their combination of large sample size and detailed measurement of key variables—including timing of immigration and English-language skill. The Public Use Sample of the 1986 census is markedly inferior because the ABS greatly reduced the detail available on respondent's birthplace, parents' birthplaces, age, time in Australia, educational qualifications, and occupation—all key variables here.

<sup>4</sup> Census documents are available from Information Services, Australian Bureau of Statistics, Post Office Box 10, Belconnen, ACT 2616, Australia.

high educational attainments with short durations of labor-force experience; it also conserves cases and so provides more precise estimates. We set the upper age limit to 64 to reduce selectivity associated with the timing of retirement.

*Selectivity bias.*—There is a risk of selectivity bias in that the sample does not include immigrants who returned home, a bias if the returnees were unusually successful, or unusually unsuccessful. Definitive evidence is lacking, but the best expert opinion is that returnees differ little from their peers who stay—family reasons preponderate in the decision to remigrate (Price 1987; Thompson 1980). In addition, there is a risk of selectivity bias in omitting men who are still in school. But detailed analyses suggest that this may not be the case,<sup>5</sup> and Chow tests for all nine ethnic groups—for both income and status models—show no significant difference between equations estimated for men age 16 and over and those for men 20 and over (see App. B and App. C). Thus, we conclude that selectivity bias does not distort our estimates. We therefore begin the analysis at age 16, the end of compulsory schooling and the usual age to start work in 1981.

#### Attitudinal Data

The attitudinal data are from the 1984 round of the Australian National Social Science Survey, a representative national sample ( $N = 3,012$ ). In the most-urban three-quarters of Australia, we used an area probability sample and collected the data through face-to-face interviews. In rural areas, we took a simple random sample from the (compulsory) electoral register and collected the data via a postal questionnaire. The response rate, defined optimistically as completions as a percentage of completions plus refusals, was 67% (63% for urban interviews and, after five follow-ups, 79% in rural areas). The pooled sample is representative of the

<sup>5</sup> Metric regression coefficients will be unaffected by this selectivity unless our model is misspecified (e.g., if the link between education and occupational status differs more for the youngest cohort than for those slightly older). Nonetheless, to see how much bias there might be, we repeated the analysis of occupational status for three alternative age ranges: (1) starting at age 16 (greatest risk of selectivity bias); (2) starting at age 20 (when few Australians are still in school); and (3) starting at age 25 (virtually no Australians in school). The upper age limit was 64 throughout. We focused on the crucial case, the comparison of native stock with Mediterraneans—the group most likely to suffer discrimination and by far the largest non-Anglophone group. In fact, the predicted values are virtually identical in the three samples, most differing by less than half a status point. The biggest difference is only 2.4 status points—trivial indeed on a variable with a standard deviation of 28. The confidence bands sit tidily inside one another (of course broadening as sample size decreases), providing yet more evidence against selectivity bias. Complete details are available from the authors.



population (see Kelley, Cushing, and Headey 1987; Kelley and Bean 1988, pp. xvi–xxiii). The data are available from the Social Science Data Archive at the Australian National University, Canberra.

### Measurement

Appendix A gives the definitions of the variables used in the models of attainment. Accurate measurement of education is vital, hence the elaborate procedures for it. Our measure slightly overestimates the education of some immigrants who came to Australia as children since many entered a grade or, sometimes, two below that usual for their age and the census asked only “age left school.”

### METHODS

*Comparing groups.*—We use ordinary least squares (OLS) regressions, which give the best linear unbiased estimates for continuous, well-behaved variables of the kind we use. We estimate separate regressions for each group: native-stock Australians (Australians born of Australian-born parents), Anglophone immigrants, Northwestern European immigrants, Eastern European immigrants, Mediterranean immigrants, Third World immigrants, Anglophone second-generation (Australian-born children of Anglophone immigrants), Mediterranean second-generation and other second-generation immigrants (there are not yet enough “others” to make finer distinctions). This allows for all possible interactions between ethnicity and other variables.

*Model specification.*—Our basic model (see appendix tables B1 and C1) is a flexible one that includes quadratic terms to capture curvilinear effects of education and labor-force experience. It separates the effects of foreign and Australian education and foreign and Australian labor-force experience. We include interaction terms that allow the effect of Australian labor-force experience to differ between those educated in Australia and those educated abroad. Models for the native stock and the second generation are identical to those for immigrants, save in omitting terms involving foreign education and experience. We estimate closely comparable models for occupational status and income, differing only in the dependent variable. Thus effects on income are total effects, including both direct effects and indirect effects through education’s (and other variables’) effect on occupational status.

We assess differences between groups by examining confidence bands around regression lines, to see where the bands for different groups overlap. The width of the band reflects our estimates’ precision. We use 95% confidence bands (e.g., Neter and Wasserman 1974, pp. 149–52)

showing, for example, that the chances are 95 out of 100 that the typical Mediterranean immigrant with an eighth grade education will hold a job of between 16 and 24 status points, all else equal (other variables are evaluated at the population mean). This approach has the important advantage of showing *where* groups differ—for example, that poorly educated members are similar while well-educated members differ.

*Assessing attitudes.*—We use full-information maximum-likelihood LISREL methods to estimate the effects of prejudice on willingness to discriminate (Joreskog and Sorbom 1986). (The block-recursive model is given later in fig. 6.) Background characteristics (age, sex, education, occupational status, family income, metropolitan residence, and ethnicity) are assumed to be measured without error. We correct for attenuation due to random measurement error in prejudice (a three-item scale) and willingness to discriminate (two items). These scales have no natural metric, so standardized coefficients are shown.

## DESCRIPTION

### Native-Stock Australians

Only 60% of adults are native born of native-born parents (table 1). Native-stock Australians average only 11 years of schooling; as in Great Britain, standards are high but levels of attainment low. Occupational status averages 37 points on a scale of approximately 0 to 100—examples of jobs with status scores near 37 include pattern maker, well driller, bookkeeper, electrician, or typesetter—higher than the average British job but lower than average U.S. job. Average earnings in 1981 were, in Australian currency, \$13,300 per year, worth about the same in contemporaneous U.S. dollars. This too is above the British average and below the U.S. average.

### The Second Generation

*Anglophone.*—The children of English-speaking immigrants—the Anglophone second generation—are about 8% of the population (see table 1). Their education, occupational status, and income levels are the same as or higher than those of native-stock Australians, so, contrary to hypothesis 1, there is no *prima facie* case for discrimination.

*Mediterranean.*—Mediterranean immigrants' offspring are now 2% of the Australian adult population. They are still young, averaging only 9 years of labor-force experience, half the native stock's. Their educational success (11.8 years, on average—more than comparable native-stock Australian children's [Clifton, Williams, and Clancy 1987]) is noteworthy in light of their parents' meager education. Insofar as an "underclass"

TABLE 1  
DESCRIPTION OF CAUSAL VARIABLES, OCCUPATIONAL STATUS, AND INCOME

| ORIGINS                     | EDUCATION<br>(Mean Years) | EDUCATED IN<br>AUSTRALIA<br>(%) | LABOR-FORCE EXPERIENCE |                              | LIMITED<br>ENGLISH<br>SKILLS<br>(%)* | OCCUPATIONAL<br>STATUS<br>(Mean<br>0-100) | ANNUAL<br>INCOME<br>(Mean \$A)† | N OF<br>CASES |
|-----------------------------|---------------------------|---------------------------------|------------------------|------------------------------|--------------------------------------|---|---------------------------------|---------------|
|                             |                           |                                 | Abroad<br>(Mean Years) | In Australia<br>(Mean Years) |                                      |   |                                 |               |
| Native stock .....          | 11.3                      | 100                             | 0                      | 18                           | 0                                    | 37  | 13,300                          | 23,420        |
| Second generation:          |                           |                                 |                        |                              |                                      |   |                                 |               |
| Anglophone .....            | 11.4                      | 100                             | 0                      | 23                           | 0                                    | 40  | 14,700                          | 3,274         |
| Mediterranean .....         | 11.8                      | 100                             | 0                      | 9                            | 6                                    | 34  | 10,700                          | 959           |
| Other .....                 | 12.1                      | 100                             | 0                      | 12                           | 2                                    | 38  | 12,100                          | 873           |
| Immigrants:                 |                           |                                 |                        |                              |                                      |   |                                 |               |
| Anglophone .....            | 11.6                      | 24                              | 8                      | 13                           | 0                                    | 38  | 14,500                          | 4,784         |
| United Kingdom .....        | 11.4                      | 27                              | 8                      | 14                           | 0                                    | 38  | 14,300                          | 3,734         |
| New Zealand .....           | 11.9                      | 9                               | 8                      | 7                            | 0                                    | 35  | 14,300                          | 617           |
| United States and Canada .. | 13.9                      | 16                              | 8                      | 10                           | 0                                    | 56  | 17,700                          | 167           |
| Ireland .....               | 11.3                      | 10                              | 9                      | 16                           | 0                                    | 34  | 13,900                          | 178           |
| South Africa and Zimbabwe   | 13.5                      | 20                              | 9                      | 8                            | 0                                    | 48  | 15,900                          | 88            |
| Northwest Europe .....      | 11.0                      | 37                              | 5                      | 17                           | 15                                   | 37  | 14,100                          | 1,065         |
| Germany .....               | 11.6                      | 41                              | 5                      | 18                           | 13                                   | 37  | 14,900                          | 449           |
| Netherlands .....           | 10.5                      | 38                              | 5                      | 19                           | 9                                    | 37  | 13,600                          | 407           |
| Other .....                 | 10.7                      | 26                              | 6                      | 13                           | 27                                   | 37  | 13,600                          | 209           |
| Eastern Europe .....        | 10.9                      | 17                              | 7                      | 21                           | 35                                   | 37  | 14,100                          | 656           |
| Poland .....                | 10.4                      | 16                              | 8                      | 23                           | 37                                   | 34  | 13,800                          | 212           |

|  |      |    |    |    |    |    |        |       |
|--|------|----|----|----|----|----|--------|-------|
| Hungary .....                                    | 11.1 | 12 | 7  | 21 | 36 | 40 | 15,400 | 82    |
| Other .....                                      | 10.9 | 19 | 7  | 21 | 33 | 36 | 13,900 | 362   |
| Mediterranean .....                              | 8.9  | 21 | 7  | 16 | 55 | 25 | 11,300 | 3,196 |
| Italy .....                                      | 8.6  | 27 | 6  | 19 | 54 | 25 | 11,700 | 1,136 |
| Yugoslavia .....                                 | 9.1  | 17 | 7  | 14 | 55 | 22 | 11,000 | 629   |
| Greece .....                                     | 8.0  | 15 | 8  | 17 | 69 | 24 | 10,300 | 599   |
| Malta .....                                      | 9.9  | 33 | 4  | 18 | 32 | 25 | 12,300 | 243   |
| Lebanon .....                                    | 9.3  | 15 | 7  | 10 | 59 | 25 | 9,600  | 202   |
| Egypt .....                                      | 11.8 | 20 | 8  | 17 | 23 | 39 | 14,000 | 136   |
| Other Southern Europe .....                      | 8.7  | 17 | 10 | 12 | 65 | 24 | 11,400 | 230   |
| Other Middle East .....                          | 9.0  | 12 | 10 | 8  | 72 | 26 | 9,800  | 121   |
| Third World .....                                | 12.1 | 16 | 8  | 9  | 36 | 41 | 13,400 | 1,115 |
| Indonesia, Malaysia and<br>the Philippines ..... | 13.0 | 13 | 6  | 9  | 22 | 48 | 13,200 | 209   |
| India .....                                      | 12.8 | 18 | 7  | 13 | 4  | 53 | 17,200 | 140   |
| Vietnam .....                                    | 11.5 | 0  | 9  | 2  | 91 | 24 | 9,400  | 121   |
| China .....                                      | 11.4 | 18 | 9  | 14 | 65 | 45 | 13,800 | 98    |
| Pakistan and Bangladesh .....                    | 12.9 | 17 | 9  | 9  | 7  | 43 | 14,200 | 75    |
| Asia NEC† .....                                  | 11.9 | 15 | 8  | 7  | 50 | 40 | 14,600 | 164   |
| Latin America .....                              | 10.9 | 12 | 10 | 8  | 54 | 33 | 11,400 | 127   |
| Africa NEC† .....                                | 11.4 | 19 | 7  | 9  | 23 | 37 | 13,200 | 87    |
| Oceania NEC† .....                               | 11.2 | 41 | 4  | 9  | 10 | 35 | 12,400 | 94    |

SOURCE.—1% PUS of the Australian 1981 census.

\* Percentage speaking English worse than "very well."

† Rounded to the nearest \$100.

‡ NEC = not elsewhere classified.

implies low attainments in several generations, this shows that no Mediterranean "underclass" is emerging. Their occupational status averages 34 points, well above their parents' 25 points, so no cycle of deprivation is apparent in jobs either. Nonetheless, their status is not as high as the native stock's, and their income is noticeably lower, by some \$2,500 on the average. So the possibility of discrimination cannot be dismissed.

*Other second generation.*—Children of immigrants from northwest Europe, Eastern Europe, and the Third World are 2% of the population. They are still young, with only two-thirds the labor-force experience of the native stock and a little less educated. Their occupational status is as high as native stock's but their income is a little less, some \$1,200, so discrimination is a tenuous possibility.

### Immigrants

*Northwest Europe.*—Immigrants from Germany, the Netherlands, and other advanced societies of northwestern Europe are 3% of the population (see table 1). They are almost as well educated as the native stock. Almost all speak English well. Their occupational status is the same as the native stock's, and their income is a few hundred dollars higher, so discrimination is unlikely, contrary to hypothesis 2.

*Eastern Europe.*—Immigrants from Poland, Hungary, and other Eastern European countries make up some 2% of the population. They have only a little less schooling than the native stock. About a third have limited English skills. Their occupational status is as high as the native stock's and their income fractionally higher, so discrimination does not appear likely.

*Mediterranean countries.*—Immigrants from Italy, Yugoslavia, Greece, and other countries in the Mediterranean region make up 8% of the population. They came a long while ago and have almost as much local labor-force experience as native-stock Australians (16 years vs. 18), plus seven more years in their home countries. They have little education, averaging only nine years, well below all other groups. More than half have difficulties with English. They also have the lowest status occupations, averaging 25 status points, about the level of a cook, a gas fitter, a plasterer, or a carpenter. By contrast, all the other immigrant groups, every second-generation group, and native-stock Australians get better jobs on average, between 34 and 41 status points. Mediterraneans also earn less than almost any other group, some \$2,000 less than native-stock Australians. Thus the possibility of discrimination is definitely open (hypothesis 3). These simple facts emphasize the distinctiveness of Mediterraneans (and their Australian-born children). Thus they are, correctly, the focus of most analyses of discrimination in Australia.

*Third World.*—Immigrants from Indonesia, Malaysia, the Philippines, India, Vietnam, and other less developed countries of Asia, Africa, Oceania, and Latin America—a diverse lot—make up 3% of the population. Most came recently and have only half the labor-force experience of the native born. A third have difficulties with English. They have rather more education and higher-status jobs than the native stock. But their income is the same, despite their high-education and status. So some *prima facie* possibility of racial discrimination exists (hypothesis 4).

These simple facts do not show whether the Australian labor market discriminates or whether immigrants and their children get a fair return to their education. To reveal this, we must turn to multivariate analysis.

## RESULTS

### Baseline: Native-Stock Australians

An Australian's life chances are shaped by his education (fig. 1, left panel). Simple, unadjusted means show the strong link with occupational status (dotted line). This link is clarified by the regression estimates (with an unbroken line) representing the 95% confidence band) controlling for language skills, place of residence, citizenship, marriage, fertility, and labor-force experience. The confidence band is narrow, indicating quite precise estimates. For example, an otherwise typical native-stock Australian with eight years of education—the legal minimum—can expect a job

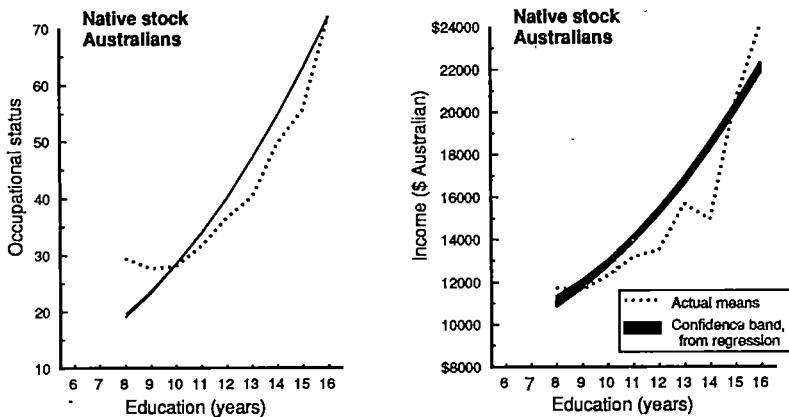


FIG. 1.—Effect of education on occupational status and income for native-stock Australians: actual means and confidence band around regression line, controlling for labor-force experience, family arrangements, and urban-rural residence. Computed from regression equations shown in appendices B and C.

of about 20 status points, jobs such as barber, messenger, upholsterer, or bricklayer. Men (otherwise typical) with 11 years of education—near the native-stock average—can expect jobs of about 34 status points, such as tailor, policeman, or plumber. With 16 years of education—the usual university honors degree—men can expect jobs of about 72 status points, such as systems analyst, meteorologist, or administrative officer in local government.

Education also pays well (fig. 1, right panel). Simple means show a strong link to income (dotted line), which is even clearer after we adjust for other factors by using regression methods (shaded area, giving the confidence band). A native-stock man with only 8 years of education can expect an income of slightly over \$11,000 in 1981 Australian dollars, all else equal; with 11 years, a more comfortable \$14,000; with a four-year university degree, about \$22,000. We include native-stock Australians in each subsequent graph for comparison, and for readability we give point estimates rather than the narrow confidence band.

### Hypothesis 1: Ethnic Minorities

The most extreme hypothesis predicts discrimination against anyone differing from the dominant group in ethnic origin, even though born and raised in Australia. A U.S. analogue would be discrimination against descendants of European immigrants. We can test this hypothesis with three groups of varying cultural and ethnic distinctiveness (fig. 2).

*Anglophone second generation.*—The Australian-born children of immigrants from Great Britain and other English-speaking countries are culturally very similar to native-stock Australians, themselves overwhelmingly of British or Irish ancestry. They reap the same occupational and income returns to their education, contrary to hypothesis 1.

*Mediterranean second generation.*—The Australian-born children of Mediterranean immigrants grow up in a culture different from the dominant Australian norm. Nonetheless they get jobs just as good as the native stock's and incomes just as high. Thus, the differences noted earlier are entirely a consequence of differences in education, experience, language skills, place of residence, and the like. In particular, their noticeably lower actual income, \$2,500 less than the native stock's, merely reflects their youth and lack of labor-force experience.

*Second generation from other countries.*—The Australian-born children of immigrants from northern Europe, Eastern Europe, and the Third World come from cultures different from the Australian norm. But, other things equal, they do about as well as native-stock Australians in both occupation and income. The only slight puzzle is income: those with minimal education earn a little more than native-stock Australians

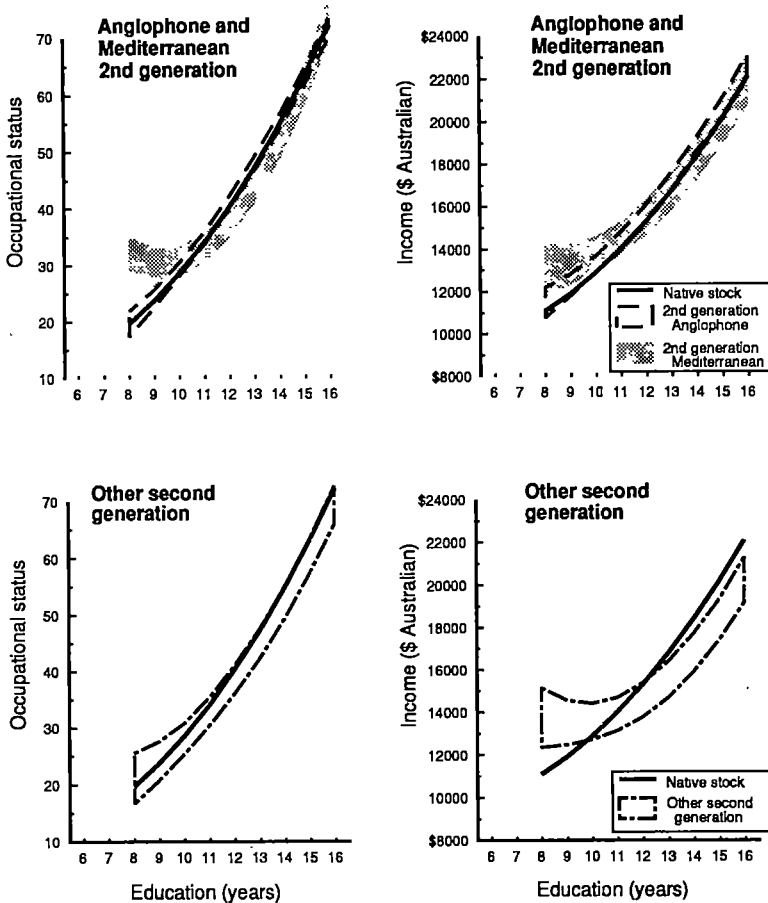


FIG. 2.—Effect of education on occupation and income: 95% confidence intervals for the second generation of Anglophone origins, the second generation of Mediterranean origins, and the second generation of “other” origins. Computed from regression equations shown in appendices B and C.

while the few with university degrees earn a little less. Simple discrimination would not produce such a mixed pattern. It is more likely due to chance or to our imperfect understanding of income's determinants. In sum, these results provide persuasive evidence against the strongest discrimination hypothesis: that immigrants' children suffer because of their ethnic background (hypothesis 1). They do not. Moreover, the best evidence for the United States and Canada also shows no discrimination against immigrants' children (Boyd, Featherman, and Matras 1980; Neidert and Farley 1985, pp. 845–46).



Hypothesis 2: Discrimination against All Immigrants

*Anglophone immigrants.*—The second, somewhat weaker, hypothesis predicts prejudice and discrimination against all immigrants, even those from similar cultures, but not against the native born. A U.S. analogue would be discrimination against British immigrants, but not against their American-born children. We test this by looking at the fate of immigrants from Britain, Ireland, and other English-speaking countries. They are culturally close to native-stock Australians; grew up in countries at a similar level of economic development; and, even if educated overseas, attended schools with similar organization and equally high standards. But many natives dislike Anglophone immigrants: on a “feeling-thermometer” question—with answers ranging from a low of zero for “very cold or unfavorable” to 100 for “very warm or favorable”—British immigrants average only 55, New Zealanders 56, and Americans also 56, all well below the generous 79 Australians give themselves.

But this prejudice has no economic consequences: Anglophone immigrants have the same occupational status and income as do native-stock Australians with comparable education (fig. 3). Moreover, it does not matter where immigrants went to school: Australian education (band outlined in dashes) and education in other Anglophone countries (shaded band) have the same value—probably because these very similar systems impart similar cognitive skills. In short, there is no economic discrimination against migrants culturally similar to native Australians. Similarly,

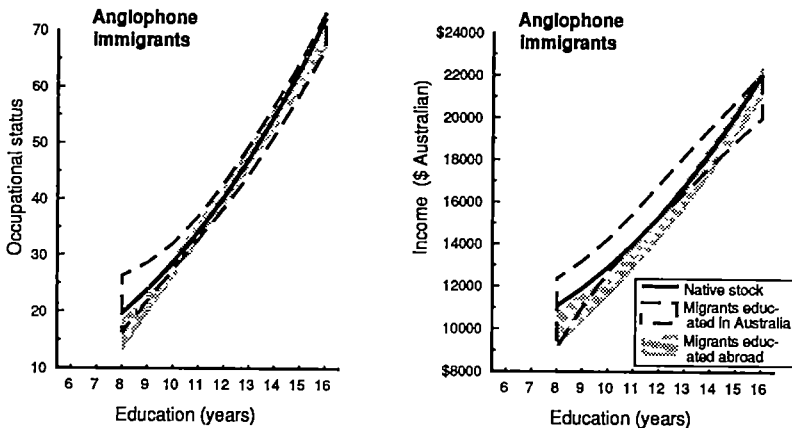


FIG. 3.—Effect of education on occupation and income: 95% confidence intervals for immigrants from Anglophone countries; computed from regression equations shown in appendices B and C.

British immigrants to the United States do not face discrimination (Neidert and Farley 1985, tables 1, 3). Hypothesis 2 is clearly refuted.

### Hypothesis 3: Immigrants from Different Cultures

The third hypothesis, weaker still, predicts that discrimination sets in only after we have passed down the social distance queue to culturally distinct immigrants. A U.S. analogue would be discrimination against Polish or Hispanic immigrants but not British immigrants. Australia provides a good test of this hypothesis with immigrant groups that vary in cultural distinctiveness and coming from countries at different levels of economic development.

*Northwest European immigrants.*—Immigrants from Germany, the Netherlands, and elsewhere in northwestern Europe differ from native-stock Australians in language and some aspects of culture. But they come from countries at an equally high level of economic development, with similar economic institutions, and with schools with high academic standards.

The cleanest test is the fate of those educated in Australia: they have no unfamiliar educational qualifications, nor wasted knowledge of foreign law, lore, or economy; no lack of local knowledge and contacts. And in fact they do just as well as native-stock Australians with similar education, labor-force experience, and demographic characteristics (fig. 4). Their occupations are neither better nor worse, their incomes neither higher nor lower.

Those who migrated as adults also do very well. Their occupations are much the same as the native stock's. Those with little education also earn just as much, although the highly educated may earn somewhat less than native stock with comparable education. Given uncertainties about the local content of their education and possible imprecisions in our measure of language skill and model of earnings, we are not inclined to make much of this small difference. In short, there is no appreciable evidence of discrimination against northwestern European immigrants, contrary to hypothesis 3. Results are similar in the United States (Neidert and Farley 1985, tables 1, 3).

*Eastern European immigrants.*—Immigrants from Poland, Hungary, and other countries of Eastern Europe differ in language and culture from native-stock Australians. Moreover, their home countries were at a lower level of economic development, with less complex and differentiated economies; most had little experience of market economies. The most definitive test is, again, those who completed their schooling in Australia. In fact, they have jobs at least as good as the native stock's and earn just as much, without the slightest sign of discrimination (fig.

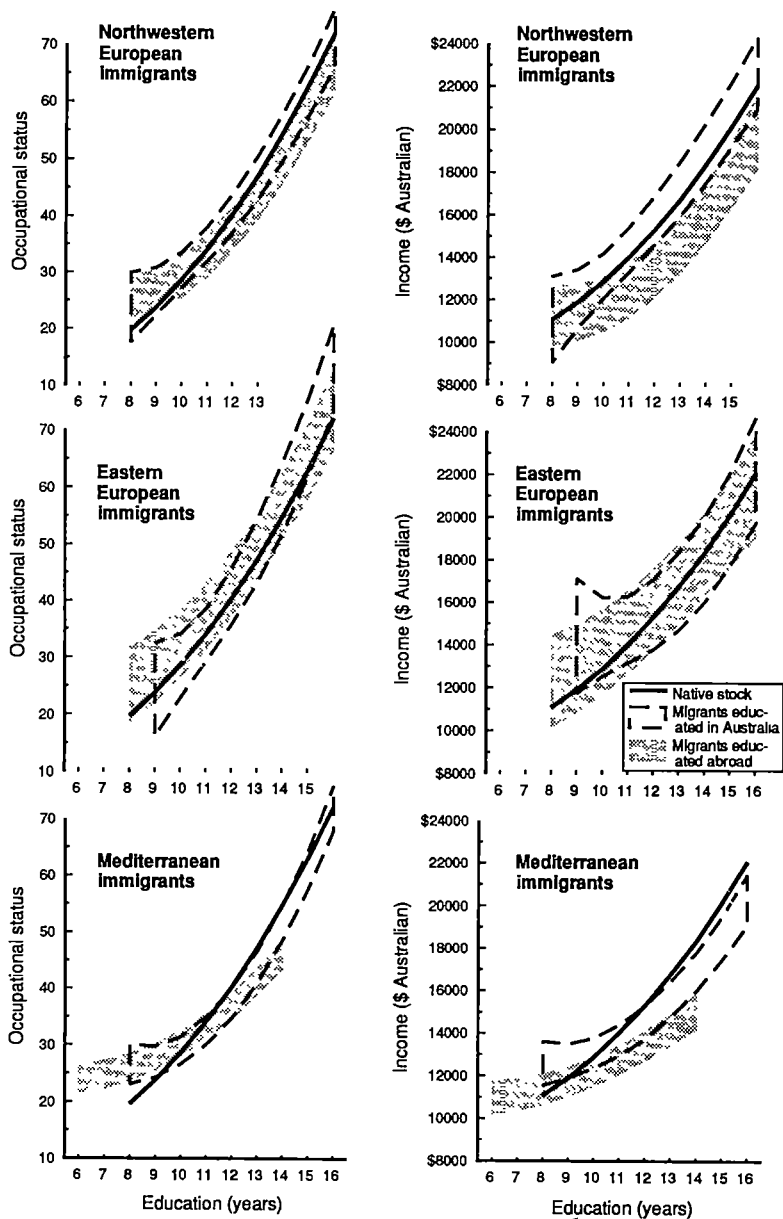


FIG. 4.—Effect of education on occupation and income: 95% confidence intervals for estimated means for immigrants from several regions.

4). Nor is there evidence of discrimination against Eastern Europeans who came as adults, mostly refugees. Despite their often traumatic and unplanned departure, without capital or previous knowledge of Australia, they have done very well indeed, certainly no worse than the native stock. This is broadly similar to the success of Cuban refugees in the United States (Pedraza-Bailey 1985) and is strong evidence against hypothesis 3.

*Mediterranean immigrants.*—Migrants from Italy, Yugoslavia, Greece, and other Mediterranean countries differ markedly from native-stock Australians. They differ in many aspects of culture and language; many have very limited English skills. They come from countries which had low levels of economic development, with little industry and requiring only simple skills 20 or 30 years ago when most left; many were peasants, from isolated and backward rural areas. In Australia, many are still readily identifiable as foreign, with strong accents and darker complexions. Even today there is more prejudice against them than against British immigrants, with thermometer scores of 52 for Italian and 49 for Greek immigrants (compared with 55 for British immigrants and 79 for other Australians). They are prime candidates for prejudice and discrimination, and the main topic of debate in the Australian literature. Hispanic and Yugoslav immigrants would be U.S. equivalents.

*Mediterranean immigrants educated in Australia.*—The most definitive test is again those who migrated as children and finished their education in Australia. In fact, Australian education has the same impact on Mediterranean immigrants' jobs as on the native stock's: brown eyes, olive skin, and 11 years of Australian education get a man just as good a job as do blue eyes, sunburned skin, and 11 years of Australian education (fig. 4). The results for income are broadly similar: Mediterraneans earn about as much as native-stock Australians with comparable schooling. At the very lowest levels of education, they may even do somewhat better but at the university level somewhat worse. But these differences are small and inconsistent with any simple type of discrimination, which would presumably disadvantage all, well and poorly educated alike; given the various uncertainties in modeling income we would not be inclined to make anything of them. In all, the benign fate of Mediterranean immigrants educated in Australia provides compelling evidence against hypothesis 3.

*Mediterraneans educated abroad.*—The fate of Mediterraneans who finished their schooling before migrating is more complex (fig. 4). The great majority have little education—they average under nine years—but they climb as high on the occupational ladder as do comparable native-stock Australians or perhaps even higher. They also earn as much as native-stock Australians with equally modest educational attainments.

Thus there is no discrimination against the poorly educated majority. If anything, the results are more consistent with discrimination in their favor (a possibility occasionally raised, but unlikely) or more plausibly with a prosperous ethnic enclave economy (Evans 1989). But at higher levels of education, disadvantages emerge and are clear by the end of secondary school and the first few years of tertiary education (this group has virtually no university graduates). Those finishing secondary school (12 years) get jobs a couple of status points below those obtained by comparably educated native stock, while those who go on to 13 or 14 years get jobs 5–10 points lower. The income disadvantage sets in even sooner, with those having 12 years of education around \$2,000 worse off, and those with 14 years \$3,000–\$4,000 worse off. While this is irrelevant to the lives of most Mediterranean immigrants, among whom few have even 12 years of schooling, it is nonetheless the clearest suggestion of discrimination yet. Is it discrimination or is there another explanation?

It might be argued that this disadvantage reflects Australian employers' unfamiliarity with Mediterranean immigrants' qualifications, but this seems unlikely in light of the experiences of northwestern and especially Eastern European immigrants. Eastern European are few—very few indeed from any one country—so their qualifications are surely the least familiar. But, unlike Mediterraneans, they get jobs as good as do natives with the same amount of education. Moreover, government agencies provide formal recognition of many foreign qualifications (e.g., Australian Mission to Study Methods of Training Skilled Workers in Europe [hereafter Australian Mission] 1969), which is particularly important for the many skilled and semiskilled jobs requiring occupational licenses. The system is far from perfect, but it provides employers with information beyond their own limited knowledge of foreign qualifications.

The Mediterranean disadvantage does not reflect visually triggered prejudice, nor is it prejudice against those of Mediterranean culture. If so, less educated Mediterraneans—more distinctive in style, appearance, and accent—would be at the greatest disadvantage; instead they suffer no disadvantage. Nor do Mediterraneans who came to Australia as children, nor do Australian-born children of Mediterraneans. Moreover, if it were visually triggered prejudice, Asian immigrants—well behind Mediterraneans in the social distance queue and more visually distinctive to Australian eyes—would experience at least as much disadvantage. Instead, as we will see, there is no sign of discrimination against Asian immigrants.

The most likely explanation of Mediterraneans' pattern of disadvantage is lower quality education. Although comparable data on cognitive skills are rare, good survey data on science skills from the respected International Association for the Evaluation of Educational Achievement

suggest that even in Italy, the most developed of the Mediterranean countries, the quality of education was lower than in Eastern or north-western Europe, and that the achievement gap widened during secondary school (Comber and Keeves 1973, p. 159). The problem is even more acute for immigrants because many came from peasant families (Kelley and McAllister 1984*b*) and attended village schools of indifferent quality (Australian Mission 1969). There is also indirect evidence in that this distinctive pattern of disadvantage appears elsewhere as a consequence of known differences in educational quality, for example, for U.S. blacks who some decades ago moved from the South, with demonstrably inferior schools, to the North. Having gone to school in the South brought little or no disadvantage to migrants with little schooling but seriously harmed job prospects for those with more education (Hogan and Pazul 1982)—exactly the pattern we find for Mediterranean immigrants in Australia.

In sum, there is no evidence of discrimination against any of these culturally distinctive immigrant groups, except Mediterranean immigrants educated abroad. And for the great majority of them there is no sign of discrimination either. Only the few with 12 or more years of education do worse than native-stock Australians. We have assessed several possible explanations for this, and the most plausible is that it reflects the lower quality of education in their home countries. So, in all, there is no substantial evidence of discrimination against culturally distinct immigrants in Australia, contrary to hypothesis 3. Only the possibility of racial discrimination remains.

#### Hypothesis 4: Racial Discrimination

The fourth hypothesis, the weakest, predicts discrimination only against those migrants who differ from the dominant population in race or color, as well as language and culture. A U.S. analogue would be discrimination against Vietnamese or Haitian immigrants but not against Hispanic or European immigrants, or against immigrants' U.S.-born children. In Australia this group is composed of immigrants mainly from Vietnam, the Indian subcontinent, and Malaysia, Indonesia, and the Philippines; a very few are from Africa, Latin America, or Oceania. These are the most distinctive immigrants to Australian eyes and the objects of the greatest prejudice (Callan 1983; Callan and Gallois 1983), with this prejudice often expressed as aversion to distinctive Asian cultural practices, for example, their religions and the unfamiliar scents of their cooking (Australian Department of Immigration and Ethnic Affairs 1986). Feeling-thermometer scores for Vietnamese immigrants, by far the largest Third World group in recent years, are much lower than for other immigrants, averaging only 41. Thus Asians' distinctiveness, the rapidity of

Australia's change to a multiethnic society, and long-standing prejudices would seem to make discrimination more likely against them than against any other ethnic group. Does this ethnic prejudice impair their chances in the economy?

Again, the most definitive test is the fate of those who immigrated as children and finished their education in Australia. In fact, they do just as well as the native stock both in occupational status and in income: there is no sign of discrimination (fig. 5). Nor is there much evidence of discrimination against those educated abroad. They get jobs that are just as good as those held by the native stock. Their incomes are about as high as well, save possibly for a deficit of a couple of hundred dollars a year for the (very few) college graduates among them.

In all, the evidence against racial discrimination is strong. The Australian labor market is indifferent to race and color (save perhaps for aborigines, too few to analyze even with our large sample). Hypothesis 4 is clearly refuted.

#### Hypothesis 5: Primacy of Profit

The competitive market theory argues that profit takes primacy over prejudice: even if an employer is prejudiced and would like to discriminate, it is too expensive to do so (hypothesis 5). The reason is that nondiscriminating employers, perhaps minority entrepreneurs in an enclave

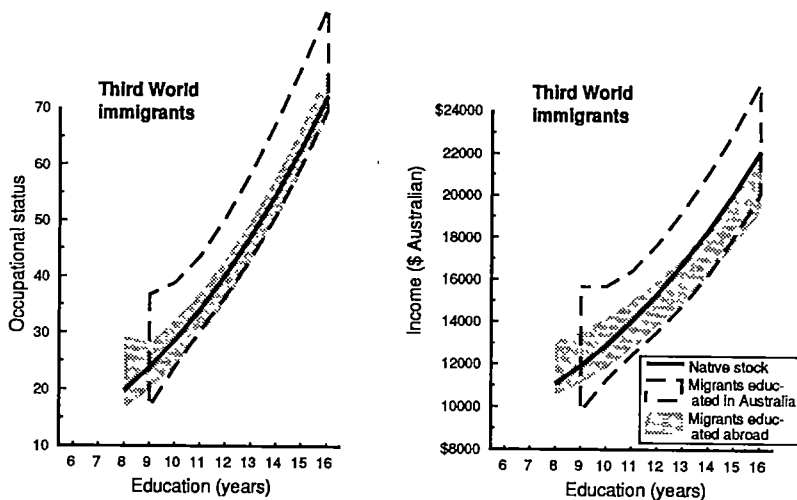


FIG. 5.—Effect of education on occupation and income: 95% confidence intervals for immigrants from Third World countries. Computed from regression equations shown in appendices B and C.

economy, could hire ethnic labor more cheaply and so get rich at the expense of the discriminator. The evidence thus far is consistent with this hypothesis and is strongest precisely where the comparison is clearest: for ethnics educated in Australian schools. But this is very indirect evidence. By contrast, we will see that direct evidence on employers' willingness to discriminate argues strongly against the hypothesis.

## A REASSESSMENT

The theory that widespread prejudice against ethnic minorities leads to economic discrimination is long standing, highly plausible, and widely believed. But it is not true, at least not in Australia. Why not?

### Does Prejudice Lead to Discrimination?

The link between employers' (or workers') prejudice and their intent to discriminate is central to the thesis. If that fails, the theory falls. To test the link we collected data from a large representative national sample. We measure prejudice with three items eliciting feelings about "immigrants from Italy," "Greek immigrants," and "Vietnamese immigrants" using the familiar Michigan feeling-thermometer format. We measure desire to discriminate by two questions, asked far apart in the two-hour interview (and far from the prejudice questions): "If a native-born Australian and a migrant both were applying for a job and both were equally qualified, which one would you hire if you had the choice?" and "If a migrant and a native-born Australian both apply for a job, the Australian should be given preferential treatment." Maximum-likelihood LISREL estimate are shown separately for native-born employers (fig. 6, panel *A*)—that is, business owners and high-level supervisors who do the hiring—and for all other native-born participants (panel *B*).

Warmer toward immigrants are the well educated, those with high-status occupations, urban residents, women, and the Australian-born children of non-Anglophone immigrants—a pattern of prejudice found in many other countries. But, less typically, older people are also warmer, particularly after adjusting for their limited education.

Warm feelings toward immigrants have a massive effect on desire to discriminate against them. For employers, the  $\beta$  coefficient, controlling for differences in socioeconomic and demographic factors, is fully  $-.61$ . Nor is this merely an artifact of LISREL's correction for attenuation due to random measurement error, or any obscurity in LISREL's sometimes opaque methods; the corresponding standardized OLS regression coefficient using simple additive scales is fully  $-.44$ . Workers and customers are similar to employers.



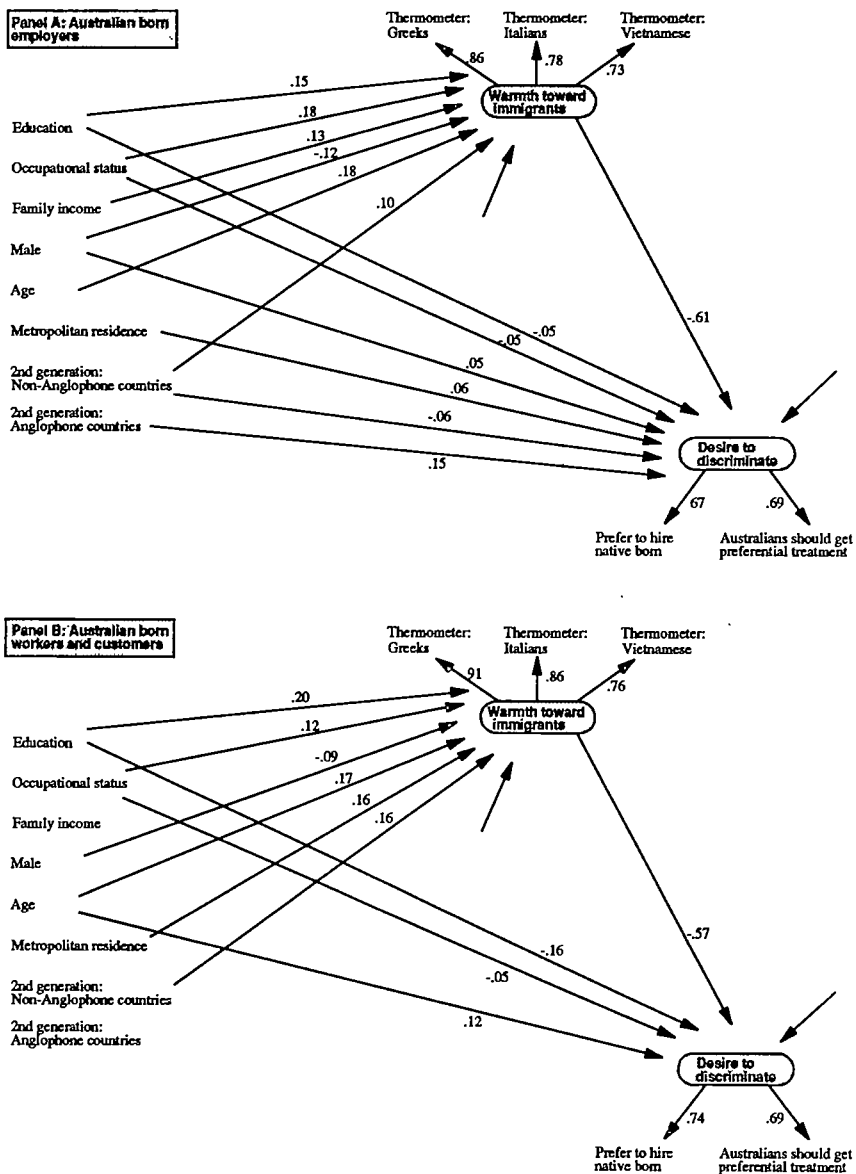


FIG. 6.—Warmth toward immigrants and the desire to discriminate: standardized LISREL coefficients for Australian-born employers (panel A) and for Australian-born workers and customers (panel B). Coefficients under .05 are not shown. These maximum-likelihood estimates are from the National Social Science Survey, 1984–85.  $N = 3,012$ .

In short, prejudiced Australians are likely to think that discrimination is proper and likely to claim that they would themselves discriminate. Prejudice clearly does lead to discrimination; that part of the prejudice/discrimination theory is strongly supported. This is also strong evidence against economists' thesis that the primacy of the profit motive precludes employers from discriminating (hypothesis 5).

### How Much Prejudice?

Only one major link in the prejudice/discrimination thesis remains: the assumption that there is enough prejudice to crowd immigrants into a secondary labor market, forcing them to accept lower-status jobs and lower pay. This requires that the great majority of employers discriminate since it takes only a minority of unprejudiced employers to provide enough good jobs for immigrants, themselves a minority. If a few unprejudiced employers hire immigrants—or a few prefer getting rich to acting on their prejudices—then competition from them will drive natives' and immigrants' wages to equality; that risk is why discrimination is enforced by law, as in South Africa, Malaysia, or the U.S. South in the past. But Australia, like most developed nations, has no law to enforce discrimination; instead, there are laws against it. So if it is to exist nonetheless, there must be strong normative consensus and decisive social pressure against employers who threaten to break ranks.

Is there a consensus in favor of discrimination in Australia, or even majority agreement? The answer is unequivocal: even when discrimination is clad in the polite guise of "preference" to the native born, only 31% of the native born would discriminate. Similarly, on the second question, only 30% would themselves favor a native-born job applicant over an immigrant. Furthermore, business owners and high-ranking managers, those who actually make hiring decisions, are no more prejudiced. And the numerous immigrant entrepreneurs in enclave economies are, if anything, disposed to favor their own kind. Since immigrants constitute under 30% of the work force, there is no shortage of jobs with unprejudiced employers, much less any consensus that would force unprejudiced employers to discriminate against their will.

The reason there is no consensus in favor of discrimination is that Australians are not very prejudiced. If anti-immigrant prejudice were intense—with scores near zero on the feeling thermometer—then discrimination would be widely supported and could narrow immigrants' job opportunities (point *a* in fig. 7). But even in that extreme case, it is not clear that there would be enough discrimination to generate a split

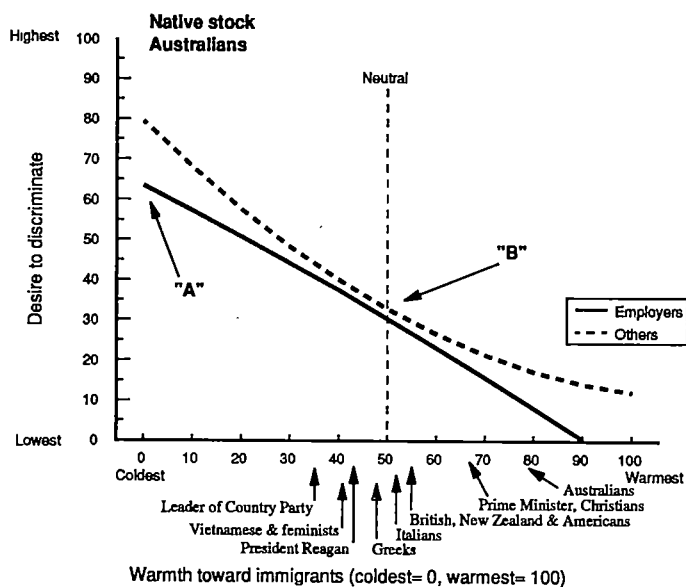


FIG. 7.—Effect of warmth toward immigrants on desire to discriminate: predicted values from regression controlling for age, sex, education, occupational status, income, and urban residence.

labor market—support for it would still be far from unanimous. In reality, attitudes toward immigrants are very much more favorable, being concentrated around the neutral point on the thermometer scale, and, at that level, there is little support for discrimination (point b).

To put this in perspective, we show how Australians feel not only about immigrants but also about other salient groups (fig. 7). Beginning at the top, Australians give themselves a generous 79. The incumbent prime minister, the middle class, the working class, and Christians come next, in a tight cluster between 65 and 69. Next, with near-neutral scores (mid-40s to mid-50s), come British immigrants, New Zealand immigrants, Americans, Italian immigrants, Greek immigrants, environmentalists, a former prime minister, Prime Minister Thatcher of Great Britain, and civil servants. Then come Vietnamese immigrants, former U.S. President Reagan, and feminists (near 40). Vietnamese are clearly the least popular immigrants, but no worse regarded than President Reagan and better regarded than the leader of the National party (previously deputy prime minister in the federal government). In sum, immigrants in Australia are not especially unpopular—even the least popular fare no worse than feminists, minor party politicians, and recent American presidents.

## CONCLUSION

## Summary

A venerable sociological research tradition suggests that ethnic prejudice leads to discrimination that forces ethnic minorities into lower-status jobs with lower pay than majority workers with comparable skills and experience. This theory implies that prejudice and discrimination increase with the social distance between minority and majority. By contrast, neoclassical economic theory suggests that discrimination cannot last in a competitive market because employers would lose money by refusing to hire inexpensive minority workers instead of expensive majority workers. Recently, many (but not all) rigorous multivariate analyses have begun to cast doubt on the earlier evidence of discrimination, particularly concerning ethnic as opposed to racial minorities. Australia provides a valuable test case since its immigrants are numerous, recent, and varied.

We tested the prejudice/discrimination hypothesis for eight minority groups using data from the Public Use Sample of the 1981 Australian census that includes measures of language skills, education, occupational status, income, and the timing of immigration quite precisely. The data on timing is especially important, for it allows us to distinguish foreign from Australian education and labor-force experience. Our flexible model allows for curvilinearities and interaction effects, particularly in contrasting the effects of education and experience obtained in Australia with those obtained abroad.

Our evidence shows that all ethnic groups, immigrants as well as their Australian-born children, receive jobs and earnings commensurate with their education, experience, and skills. There is no economic discrimination: the venerable sociological image of a social distance ordering, with the closest groups facing little discrimination and the most distant groups facing a great deal, does not match Australian reality.

This seems to support neoclassical economists' argument that employers will not discriminate. But we also found compelling evidence against their thesis. Data from a large, representative national sample show that many Australians are prejudiced against immigrants, especially ones distant from the Anglo-Celtic mainstream. Moreover, the prejudiced are definitely willing to discriminate against immigrants in hiring—although it takes quite a lot of prejudice to generate even a moderately strong desire to discriminate. This is true of owners and high-level managers, who actually make hiring decisions, as well as ordinary citizens. Thus, cold-blooded calculations of profit do not sweep away the link between prejudice and the desire to discriminate; instead, employers take account of their ethnic preferences ("tastes") rather than conforming to the economists' model of pure profit maximization.

Why then do so few employers want to discriminate against immigrants and hire only natives? So far as we can see, the answer is not market pressures, nor the dominance of the profit motive, nor yet the alleged universalism of modern society, but simply that few employers are very prejudiced. Only a minority, under one-third, are sufficiently prejudiced to want to discriminate. Immigrants are far from pariahs: there is as much, or more, prejudice against politicians, feminists, and the (then) president of the United States. Most employers do not want to discriminate, and they provide plenty of jobs for ethnic minorities.

Thus both sociologists' prejudice/discrimination hypothesis and neo-classical economists' argument about market forces are partly right and partly wrong. A reassessment is in order.

### Reassessment: Economic versus Exclusionary Discrimination

Economists define discrimination as receiving less pay than others with the same economic productivity (e.g., Cain 1976). In this important sense, we have shown that there is no appreciable "economic discrimination" in Australia. But "discrimination" means more than that to most social scientists: to discriminate against a group is also to exclude them. When sociologists talk of discrimination, they usually mean such "exclusionary discrimination" as well as economic discrimination. Many studies of discrimination, and legal cases involving it, focus on underrepresentation of ethnic minorities, typically assuming that exclusionary discrimination leads to economic disadvantage. Economists themselves often slip from their technical definition to the notion of exclusion.

We suggest that "economic" and "exclusionary" discrimination should be sharply distinguished because the links between them are tenuous: exclusionary discrimination does not necessarily imply economic discrimination, nor does the absence of economic discrimination imply the absence of exclusionary discrimination.<sup>6</sup> Distinguishing between them helps explain previously puzzling patterns, notably equal returns to education despite substantial ethnic concentration in particular lines of work, for example, house building, and exclusion of noncitizens from whole industries, such as Australia's public service.

Exclusionary discrimination does not generally cause economic discrimination because equally good opportunities are not necessarily the

<sup>6</sup> The issue of exclusionary discrimination arouses moral passions, as well as sociological analyses, so it is worth emphasizing that our findings are not salient to the moral issues. Arguments opposing exclusionary discrimination on the consequentialist grounds that it leads to economic disadvantage are, our findings suggest, flawed. But our results are irrelevant to the more basic question of whether exclusionary discrimination, as a thing in itself, is morally wrong.

same opportunities. To take an extreme example, suppose the economy were arbitrarily split into two, and all companies with names beginning with the letters "A" through "N" belonged to the AN economy and hired only people whose names began with "A" through "N"; the rest of the companies belonged to the OZ economy and hired only people with names from "O" to "Z." There would then be complete segregation—universal exclusionary discrimination against OZ people in the AN economy and against AN people in the OZ economy—but no economic discrimination: there would be plenty of jobs for AN people in the AN economy, for OZ people in the OZ economy, and the two economies would pay equally well—separate but equal economies that happen to share a single country. And there are real cases where "separate but equal" is an accurate description rather than the lie it was in the American South. For example, separate Catholic and Protestant economies existed in the Netherlands until recent decades; substantially separate Moslem and Hindu economies in prepartition India; and a variety of separate ethnic economies in the Middle East during medieval times.

Such extreme segmentation does not correspond to the Australian case, or to many modern societies, but limited exclusionary discrimination exists and need not produce economic discrimination. If prejudiced employers prefer to hire natives—as around one-third of native Australian employers say they do—that still gives the prejudiced employers about 70% of the work force to choose from; so long as they do not lower their standards, their workers will be as productive as anyone else's, and they will be at no competitive disadvantage. The might not find as many employees as they would want, since they refuse to look at the other 30%, and so they might have to content themselves with running smaller businesses or substituting technology for labor. But even that is unlikely, for some workers share their prejudices and so prefer a segregated workplace—in Australia the proportion of prejudiced workers closely matches that of prejudiced employers. But this will not prevent immigrants getting commensurate returns to their skills and efforts, so long as prejudiced employers do not have a stranglehold on the economy. And they do not in Australia or other typical modern economies: a large majority of native Australian employers favor equal opportunity, and, furthermore, many immigrants are themselves employers (Evans 1989).

Thus sociologists' venerable hypothesis that prejudice leads to discrimination is both wrong (for Australian immigrants are not in fact disadvantaged) and right (for extremely prejudiced employers would indeed refuse to hire them). Similarly, neoclassical economists' hypothesis that discrimination cannot endure in a competitive economy is both wrong (for many employers say they would discriminate) and right (for immigrants nonetheless have jobs as good and earnings as high as equally qualified na-

tives). The confusion is that these hypotheses confound economic and exclusionary discrimination. Prejudice does lead to exclusionary discrimination, but exclusionary discrimination does not in general lead to economic disadvantage.

## APPENDIX A

### Variables and Scoring

#### *Socioeconomic Outcomes*

1. *Occupational status* is the socioeconomic status of respondent's occupation. The Australian Bureau of Statistics (1983*b*) detailed occupational classification is recoded into the ANU-2 occupational status scale (Broom et al. 1977). In practice, it is similar to the widely used Duncan SEI scale for the United States and compares well with other occupational status scales in cross-national analyses (Jones and McDonnell 1977). We use a linear transformation of the scale, which gives a more intuitive metric, ranging approximately from zero to 100.

2. *Income* is individual income in Australian dollars (domestic purchasing power roughly equivalent to the U.S. dollar at the time). For respondents who earned any income, the data are given in 12 categories ranging from "under \$1,000" to "over \$26,000." We coded each category to its midpoint, except that we used a Pareto estimate for the top category (2.7% of the population).

#### *Endowments: Education*

3. *Education* is years of primary, secondary, and tertiary education. Years of primary and secondary education are computed from the age at which respondent left primary or secondary school (available in the 1981 census) and usual age to start school in the respondent's home country. Starting age is 5.5 for Australia but varies widely among the countries that have sent immigrants to Australia, ranging from 5.5 for the Federal Republic of Germany and the United Kingdom up to 7.5 for many of the Scandinavian countries and Yugoslavia. In estimating starting age, we have drawn heavily on the Australian Mission (1969) and, for Eastern Europe, on the expert advice of Krzysztof Zagorski. We then estimate years of tertiary education, from detailed information about the highest degree, diploma, or certificate (Australian Bureau of Statistics 1983*c*). In this conversion, we have relied on the expert advice of Don Anderson. Finally, we add our estimates of years of school to years to tertiary education to arrive at an estimate of years of education.

4. *Education, squared*, is years of education (variable 3) minus 10, quantity squared. Subtracting a number near the mean before squaring reduces computational inaccuracies due to rounding error but otherwise leads to predictions mathematically equivalent to those obtained using a conventional squared term (e.g., Mosteller and Tukey 1977, pp. 285–86).

5. *Educated in Australia* is scored “1” for men educated in Australia. All native-born Australians are scored “1,” as are immigrants who arrived in Australia before completing their education. Immigrants who arrived in Australia after completing their education are scored “0.” The age at which one left school is asked directly and provides the necessary information for men who had no tertiary education. For men who had tertiary education, the years of tertiary education (see variable 3) are added to their age upon leaving school to estimate age at end of education. Age at arrival is estimated as current age minus years since arrival in Australia (asked in a direct question, available in single years). The (very few) immigrants who completed their education and arrived in Australia in the same year are scored as having been educated abroad.

6. *Australian education* is an interaction: education (variable 3) times educated in Australia (variable 5).

7. *Australian education, squared*, is an interaction: education squared (variable 4) times educated in Australia (variable 5).

8. *Trade qualification* is scored “1” for men who completed a recognized apprenticeship program or otherwise obtained a formal trade certificate, and scored “0” for all others who did not acquire such a qualification. Trade qualifications are required in order to obtain employment in many skilled blue-collar occupations and in some semiskilled ones, as well.

#### *Endowments: Labor-Force Experience*

9. *Australian labor-force experience* is defined as years in the Australian labor force. For men who were educated in Australia (variable 5), it is estimated as age minus age at the completion of education. For men who were educated abroad, this is estimated as current age minus age at arrival in Australia.

10. *Australian labor-force experience, squared*, is Australian labor-force experience (variable 9) minus 20, quantity squared. We subtract 20 before squaring to reduce computational inaccuracies (see variable 4).

11. *Foreign labor-force experience* is scored “0” for native-born Australians and for immigrants educated in Australia (see variable 5). For immigrants who were educated abroad, this is scored as the difference of age at arrival in Australia and age at the completion of education.



12. *Foreign labor-force experience, squared*, is years in overseas labor force (variable 11) minus 10, quantity squared. We subtract 10 before squaring to reduce computational inaccuracies (see variable 4).

13. *Australian labor-force experience for men who began their career in Australia* is an interaction: Australian labor-force experience (variable 9) times educated in Australia (variable 5).

14. *Australian labor-force experience squared for men who began their career in Australia* is an interaction: Australian labor-force experience squared (variable 10) times educated in Australia (variable 5).

#### *Control Variables*

15. *English fluency* is self-rated competence coded as three dummy variables: speaks English very well, speaks English well, and speaks English less than well. The omitted category is "speaks only English."

16. *Married* is scored "1" for currently married, "0" for others.

17. *Other adults present* is scored "1" if adults other than respondent and wife are present in the household, otherwise "0."

18. *Children present* is scored "1" if children under 18 are present in the household, otherwise "0."

19. *Citizen* is scored "1" for Australian citizens, otherwise "0."

20. *Size of place* is coded as two dummy variables: rural and small urban. The omitted category is large urban.

TABLE B1

OCCUPATIONAL STATUS: METRIC OLS REGRESSION COEFFICIENTS FOR EMPLOYED AUSTRALIAN MEN AGED 16-64 IN 1981

| CAUSAL VARIABLE                                | ORIGIN OF PARENTS OF<br>SECOND GENERATION |                         |                            |                               | IMMIGRANTS              |                            |                |                     |                   |
|--|---|-------------------------|----------------------------|-------------------------------|-------------------------|----------------------------|----------------|---------------------|-------------------|
|  | NATIVE<br>STOCK                           | Anglophone<br>Countries | Mediterranean<br>Countries | Other<br>Foreign<br>Countries | Anglophone<br>Countries | Mediterranean<br>Countries | Third<br>World | Northwest<br>Europe | Eastern<br>Europe |
| Endowments:                                    |   |                         |                            |                               |                         |                            |                |                     |                   |
| Education:                                     |   |                         |                            |                               |                         |                            |                |                     |                   |
| <i>F</i> -test for joint<br>significance ..... |   |                         |                            |                               |                         |                            |                |                     |                   |
| 1. Years completed .....                       | *   | 5.35*                   | 1.84*                      | 4.35*                         | 6.25*                   | 2.72*                      | 4.61*          | *                   | *                 |
| 2. Years squared .....                         | 5.16*                                     | 0.29*                   | 0.87*                      | 0.42*                         | .107*                   | .297*                      | .470*          | 3.20*               | 4.44*             |
| 3. Educated in Australia .....                 | 0.35*                                     | ...                     | ...                        | ...                           | 14.56                   | 2.63                       | 4.89           | .51*                | .403*             |
| 4. Interaction = (1) × (3) .....               | ...                                       | ...                     | ...                        | ...                           | -1.44                   | -.02                       | .51            | -18.57              | -10.64            |
| 5. Interaction = (2) × (3) .....               | ...                                       | ...                     | ...                        | ...                           | .207*                   | .442*                      | -.009          | .96                 | .39               |
| 6. Trade qualifications .....                  | ...                                       | ...                     | ...                        | ...                           | -3.05*                  | 1.78*                      | -5.13*         | -.068               | .25               |
| 6. Trade qualifications .....                  | -4.31*                                    | -4.80*                  | -2.62                      | -5.93*                        |                         |                            |                | -3.29*              | -4.56*            |
| Labor-force experience:                        |   |                         |                            |                               |                         |                            |                |                     |                   |
| <i>F</i> -test for joint<br>significance ..... |   |                         |                            |                               |                         |                            |                |                     |                   |
| Abroad:  |   |                         |                            |                               |                         |                            |                |                     |                   |
| 7. Years .....                                 | *   | ...                     | ...                        | ...                           | .22*                    | -.11                       | .023           | .19                 | .11               |
| 8. Years squared .....                         | ...                                       | ...                     | ...                        | ...                           | -.001                   | .002                       | -.002          | .002                | -.008             |
| In Australia:                                  |   |                         |                            |                               |                         |                            |                |                     |                   |
| 9. Years .....                                 | .41*                                      | .41*                    | .36*                       | .34*                          | .39*                    | .18*                       | .48*           | .22*                | .09               |
| 10. Years squared .....                        | -.010*                                    | -.009*                  | -.016*                     | -.003                         | -.004                   | -.002                      | -.003          | -.001               | -.013             |
| 11. Interaction = (9) × (3) ..                 | ...                                       | ...                     | ...                        | ...                           | .105                    | -.205                      | .171           | .576*               | .170              |
| 12. Interaction = (10) × (3)                   | ...                                       | ...                     | ...                        | ...                           | .0004                   | -.0134                     | .0140          | -.0047              | -.0177            |

Controls:

| <i>F</i> -test for joint significance ..... | *             | *             | N.S.          | *             | *             | *              | *             | N.S.           | *             |
|---|---------------|---------------|---------------|---------------|---------------|----------------|---------------|----------------|---------------|
| English-language skill:                     |               |               |               |               |               |                |               |                |               |
| 13. Very good .....                         | .95           | -3.03         | .54           | -4.20         | -.49          | -.72           | 1.24          | .70            | -.17          |
| 14. Good .....                              | -2.50         | -8.16         | -3.92         | 2.40          | -.55          | -4.60*         | -5.89*        | -1.77          | -6.56*        |
| 15. Poor .....                              | -6.15         | 5.33          | -5.10         | 4.98          | -.67          | -7.51*         | -10.80*       | -2.50          | -10.95*       |
| Family and household:                       |               |               |               |               |               |                |               |                |               |
| 16. Married now .....                       | 3.83*         | 4.51*         | -1.45         | 2.88*         | 3.33*         | 4.10*          | 6.83*         | 2.78           | 2.84          |
| 17. Children present .....                  | 1.23*         | .77           | -.90          | -.10          | 1.84*         | 1.00           | 1.14          | 2.11           | .27           |
| 18. Other adults present .....              | -.10          | -1.35         | -.83          | -3.26         | -.91          | .60            | -1.01         | 2.53           | 3.52          |
| Other:                                      |               |               |               |               |               |                |               |                |               |
| 19. Rural .....                             | 6.54*         | 2.90*         | 5.34*         | 1.78          | 7.77          | 11.61*         | -1.07         | .62            | -.78          |
| 20. Citizen .....                           | ...           | ...           | ...           | ...           | .52           | 2.60*          | -2.41         | .13            | .71           |
| 21. Constant .....                          | -33.12        | -33.70        | 74.60         | -21.10        | -44.30        | -8.21          | -27.41        | -9.88          | -15.36        |
| <i>R</i> <sup>2</sup> .....                 | 43            | 45            | 46            | 51            | 45            | 31             | 58            | 38             | 42            |
| Chow tests .....                            | (48.1,0,N.S.) | (58.1,0,N.S.) | (42.1,0,N.S.) | (39.1,2,N.S.) | (46.1,0,N.S.) | (1.1,1,4,N.S.) | (52.1,6,N.S.) | (1.1,2,5,N.S.) | (46.8,5,N.S.) |
| <i>N</i> of cases .....                     | 21,738        | 3,083         | 862           | 783           | 4,299         | 2,908          | 935           | 964            | 609           |

SOURCE.—1% PUS of the 1981 Australian census.

NOTE.—The Chow tests compare the estimates for men age 16–64 with estimates for men age 20–64. In each ethnic group, the *F*-value is smaller than the critical value, thus none of them shows a statistically significant difference at the .05 level.

\* *P* < .05.

TABLE C1

TOTAL INCOME EFFECTS: METRIC OLS REGRESSION COEFFICIENTS FOR AUSTRALIAN MEN AGED 16-64 IN THE LABOR FORCE

| CAUSAL VARIABLE                             | ORIGIN OF PARENTS OF<br>SECOND GENERATION |                         |                            |                               | IMMIGRANTS              |                            |                |                     |                |
|---|---|-------------------------|----------------------------|-------------------------------|-------------------------|----------------------------|----------------|---------------------|----------------|
|   | NATIVE<br>STOCK                           | Anglophone<br>Countries | Mediterranean<br>Countries | Other<br>Foreign<br>Countries | Anglophone<br>Countries | Mediterranean<br>Countries | Third<br>World | Northwest<br>Europe | East<br>Europe |
| Causal:                                     |   |                         |                            |                               |                         |                            |                |                     |                |
| Education:                                  |   |                         |                            |                               |                         |                            |                |                     |                |
| <i>F</i> -test for joint significance ..... |   |                         |                            |                               |                         |                            |                |                     |                |
| 1. Years completed .....                    | *   | *                       | *                          | *                             | *                       | *                          | *              | *                   | *              |
| 2. Years squared .....                      | 1,055*                                    | 1,064*                  | 621*                       | 203                           | 1,208*                  | 508                        | 754*           | 526*                | 840*           |
| 3. Educated in Australia .....              | 79.54*                                    | 79.19*                  | 121.92*                    | 50.87*                        | 64.16*                  | 52.48*                     | 82.51*         | 138.72*             | 76.87*         |
| 4. Interaction = (1) × (3) .....            | ...                                       | ...                     | ...                        | ...                           | -1,251                  | 1,516                      | 5,268          | -10,581*            | 9,498          |
| 5. Interaction = (2) × (3) .....            | ...                                       | ...                     | ...                        | ...                           | 127                     | -28                        | 83             | 639                 | -698           |
| 6. Trade qualifications .....               | 241*                                      | ...                     | ...                        | ...                           | -74.95*                 | 67.07                      | 34.07          | -68.52              | 116.80         |
| Labor-force experience:                     |   | -257                    | 191                        | 1,022                         | -299                    | 437                        | 430            | 110                 | 280            |
| <i>F</i> -test for joint significance ..... |   |                         |                            |                               |                         |                            |                |                     |                |
| Abroad:                                     |   |                         |                            |                               |                         |                            |                |                     |                |
| 7. Years .....                              | ...                                       | ...                     | ...                        | ...                           | 89*                     | -28                        | 73*            | -8                  | -14            |
| 8. Years squared .....                      | ...                                       | ...                     | ...                        | ...                           | -5.86*                  | -1.00                      | -6.16          | -5.16               | 1.80           |
| In Australia:                               |   |                         |                            |                               |                         |                            |                |                     |                |
| 9. Years .....                              | 174*                                      | 180*                    | 208*                       | 145*                          | 67*                     | 59*                        | 23             | -1                  | 72             |
| 10. Years squared .....                     | -9.29*                                    | -9.90*                  | 12.68                      | -9.55*                        | -3.42*                  | -2.71*                     | -12.02*        | -1.87               | -5.72          |
| 11. Interaction = (9) × (3) ..              | ...                                       | ...                     | ...                        | ...                           | 79                      | -14                        | -320           | 326*                | -99            |
| 12. Interaction = (10) × (3)                | ...                                       | ...                     | ...                        | ...                           | -9.62*                  | -10.82*                    | -20.24         | -5.79               | -13.72         |

| Control:                                    |               |               |               |               |               |               |               |               |  |               |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--|---------------|
| <i>F</i> -test for joint significance ..... |               |               |               |               |               |               |               |               |  |               |
| English-language skill:                     |               |               |               |               |               |               |               |               |  |               |
| 13. Very good .....                         | -1,184        | -3,802        | -872*         | -845          | -497          | -145          | -131          | 893           |  | N.S.          |
| 14. Good .....                              | -5,023*       | -5,518        | -851          | -175          | -2,118        | -716*         | -1,743*       | 206           |  | -1,006        |
| 15. Poor .....                              | -4,942*       | 1,599         | -178          | 486           | -1,472        | -1,069*       | -2,116*       | 1,558         |  | -1,038        |
| Family and household:                       |               |               |               |               |               |               |               |               |  |               |
| 16. Married now .....                       | 2,134*        | 2,657*        | 743           | 2,249*        | 2,125*        | 1,162*        | 2,212*        | 2,017         |  | -2,812*       |
| 17. Children present .....                  | 128           | -17           | 36            | -192          | 770*          | 243           | 853           | -47           |  | 1,464*        |
| 18. Other adults present .....              | -435*         | -386          | -688          | -1,112*       | -447          | -508*         | 1,002*        | -830          |  | 462           |
| Other:                                      |               |               |               |               |               |               |               |               |  |               |
| 19. Rural .....                             | -1,582*       | -910*         | 335           | -1,494*       | 1,740*        | 1,096         | -656          | -1,350*       |  | -140          |
| 20. Citizen .....                           | ...           | ...           | ...           | ...           | 28            | 84            | -234          | -575          |  | 46            |
| 21. Constant .....                          | -1,677        | 1,757         | 3,727         | 8,121         | -1,791        | 5,158         | 4,482         | 6,807         |  | 377           |
| <i>R</i> <sup>2</sup> .....                 | 34            | 33            | 40            | 38            | 32            | 15            | 38            | 24            |  | 2,351         |
| Chow tests .....                            | (24,1.0,N.S.) | (21,1.0,N.S.) | (17,1.0,N.S.) | (29,1.2,N.S.) | (49,1.0,N.S.) | (49,1.4,N.S.) | (35,1.6,N.S.) | (13,2.5,N.S.) |  | (10,8.5,N.S.) |
| <i>N</i> of cases .....                     | 22,968        | 3,218         | 935           | 853           | 4560          | 3,125         | 1,022         | 1,000         |  | 652           |

SOURCE.—1% PUS of the 1981 Australian census.

NOTE.—The Chow tests compare the estimates for men age 16–64 with estimates for men age 20–64. In each ethnic group, the *F*-value is smaller than the critical value, thus none of them shows a statistically significant difference at the .05 level.

\* *P* < .05.

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# Skin Tone and Stratification in the Black Community<sup>1</sup>

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Data from the National Survey of Black Americans (NSBA) (1979–80) are used to examine the effects of skin-tone variations of blacks on educational attainment, occupation, and income, net of such antecedent factors as parental socioeconomic status and such contemporaneous factors as sex, region of residence, urbanicity, age, and marital status. The findings are that not only does complexion have significant net effects on stratification outcomes, but it is also a more consequential predictor of occupation and income than such background characteristics as parents' socioeconomic status. Results are consistent with an interpretation that suggests that the continuing disadvantage that darker blacks experience is due to persisting discrimination against them in the contemporary United States.

## INTRODUCTION

In his controversial study of the black bourgeoisie, E. Franklin Frazier (1957a) argued that mulattoes, blacks with white progenitors, led a more privileged existence when compared with their "pure black" counterparts. During slavery, these fair-skinned blacks were at times emancipated by their white fathers. After slavery, their kinship ties to whites gave them an advantage over other blacks in obtaining education, higher-status occupations, and property. Because "the majority of prominent Negroes, who were themselves mulattoes, married mulattoes"

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(Frazier 1957*a*, p. 257), light-complexioned blacks passed advantages on to their light children. This process of advantage maintenance by mulattoes lasted well into the 20th century (Landry 1987). So one's position in the community ultimately reflected the amounts of "white blood" in his or her ancestry, and patterns of stratification in the black community included considerations of skin tone.

Research conducted before and during the civil rights movement suggested a continuing relationship between variations in skin tone and the life chances and outlooks of black Americans (e.g., Glenn 1963; Myrdal 1944; Ransford 1970; Seeman 1946). Fair-skinned blacks had higher levels of attainment than darker blacks on virtually every dimension of stratification. During the 1960s, however, blacks experienced unprecedented social and economic progress. Racial differences in education, income, and occupational standing narrowed significantly (Farley and Allen 1987). A surge of black nationalism proclaimed that "black is beautiful," and skin tone declined in importance as a basis of prestige within the black community. Did skin tone continue to exert an influence on black stratification patterns in this climate of expanding economic opportunity and intense racial pride?

Using data from the National Survey of Black Americans (NSBA) (1979–80), we examine the degree to which variations in the skin tones of blacks are associated with their educational attainment, occupational status, and income. We examine these relationships, net of antecedent and contemporaneous factors that affect status attainment (e.g., parental socioeconomic status, sex, marital status, region of residence, and age).

### SKIN TONE AND PRIVILEGE: THE HISTORICAL CONTEXT

Skin tone played a significant role in shaping social and economic stratification patterns in the black community. Several studies (Blackwell 1975; Drake and Cayton 1945; Davis, Gardner, and Gardner 1941; Dollard 1957; Frazier 1957*a*, 1957*b*, 1966; Myrdal 1944; Landry 1987) have noted that, in past generations, higher-status blacks tended to have lighter skin tones than lower-status blacks and that light skin tone was an important criterion for attaining prestige within the black community. According to these studies, the dominant white society had historically extended social and economic privileges, not available to darker blacks, to light-skinned blacks. Over successive generations these advantages had been cumulative so that the most successful blacks were disproportionately lighter in complexion.

The relationship between skin tone and privilege appears to have emerged during slavery. The historical evidence indicates that whites placed greater economic value on slaves of mixed parentage and used

skin tone or degree of visible white ancestry as a basis for the differential treatment of bondsmen. Myrdal (1944), for example, noted that mulattoes brought the highest prices on the slave market, that the white aristocracy preferred light-skinned blacks for personal service, and that white males were more likely to select fair-skinned female slaves over darker ones for sexual unions. Myrdal contended that light-skinned blacks were initially preferred because they were more aesthetically appealing to whites and because the prevailing racial ideology of that time held that blacks with white ancestry were intellectually superior to those of pure African ancestry. Over time, the kinship bonds between mulatto children and their white fathers also became an underlying reason for the extension of privileges to lighter-skinned blacks (Landry 1987).

Although much of Frazier's work is controversial, he makes a convincing case for the differential treatment of slaves on the basis of white ancestry and its significance through his (1957*b*) description of the status distinctions between field hands and house servants (see also Blackwell 1985). Field hands were disproportionately of pure African ancestry and were assigned to perform physically demanding, menial tasks. They remained largely unskilled throughout their servitude, had less contact with the custom and language of the larger society, and generally experienced the harshest aspects of slavery. House servants, in contrast, were largely mulatto offspring and descendants of white males and slave women. Slave masters assigned them to the more prestigious and socially desirable service positions (e.g., cook, butler, coachman, personal companion, and the like). Training for skilled occupations was often reserved for the children of these personal servants. Possession of a skill was not only esteemed and a source of pride among slaves, but it often conferred other privileges such as the opportunity to work as a free laborer, save money, and purchase one's freedom (Franklin 1980).

Being a house servant also brought other advantages including better food, clothing, and shelter (Franklin 1980) and, occasionally, the opportunity to learn to read and write (Landry 1987). Through their daily contact with whites, mulatto house slaves were exposed to the cultural views and practices (e.g., speech, dress, and mannerisms) of the larger society (Frazier 1957*b*; Franklin 1980). Once emancipated, former house servants were better prepared than former field hands to negotiate with whites and to lessen attempts at exploitation by them.

According to Frazier, mulattoes were conscious of the distinctions between themselves and darker slaves and believed that their white blood did indeed make them superior. Along with color differences in occupational status, the similarities between whites and mulattoes in physical appearance, speech, dress, and customary behavior reinforced this attitude in the slave population as a whole. Mulattoes, therefore, enjoyed

prestige among the darker slaves. Because of this structure of privilege, the slaves viewed light skin color as a desirable asset and as symbolic of more humane treatment. Black skin and black physical characteristics, on the other hand, were viewed as undesirable and as signs of inferiority. For these reasons, the negative stereotypes associated with "blackness" and the value placed on "lightness" of skin by whites became widely accepted by the slaves.

White ancestry not only functioned as a basis for occupational and status distinctions among slaves; it also operated as a selection criterion in the manumission of slaves. As children of slave masters, mulattoes were more likely than other slaves to be manumitted or permitted to purchase their freedom on reasonable financial terms (Franklin 1980; Frazier 1957*b*). Mulattoes were, therefore, overrepresented in the free black population and underrepresented among slaves. By 1850, for example, mulattoes represented 10%–15% of the total black population, 37% of all free blacks, and 8% of all slaves (Wirth and Goldhamer 1944).

In some states such as Louisiana, over 80% of the free population was of mixed ancestry (Landry 1987). Mulattoes were not only more likely to be manumitted than other slaves but were also more economically secure than other free blacks. The occupational skills acquired as former house servants provided mulattoes with opportunities for more lucrative employment (Landry 1987). With more than a subsistence wage and with continued support from white relatives, many acquired land and other property. A surprisingly large proportion of free blacks was also literate, and a few managed to obtain a formal education (Franklin 1980). The more successful and affluent free blacks tended to be mulatto (Landry 1987).

Because of a stratification process that provided blacks of mixed parentage with opportunities for training, education, the acquisition of property, and socialization into the dominant culture, mulattoes emerged at the top of the social hierarchy in black communities following the Civil War (Frazier 1957*a*, 1957*b*). Although this varied according to geographical location, the mulatto elite generally consisted of a combination of small businessmen, skilled laborers, service workers with white clientele, and a sprinkling of professionals (Frazier 1957*b*; Landry 1987). Though these occupations were more prestigious and paid higher wages than those available to the largely impoverished black majority, membership in the elite depended strongly on family background, light skin color, a heritage of freedom before Emancipation, and a life-style patterned after affluent whites (Blackwell 1985; Landry 1987). Mulattoes maintained their elite position in the black community for 50 years following Emancipation by passing their advantages on to their children, continuing their close association with whites, and avoiding intermarriage with darker

blacks (Blackwell 1985; Frazier 1957*b*, 1966; Landry 1987). So, light skin color continued to be a distinctive characteristic of upper-class status and to shape the opportunity structure in the black community well into the 1920s.

#### SKIN TONE AND OPPORTUNITY: THE TWENTIETH CENTURY

Frazier (1957*a*, 1957*b*) argued that the influence of white ancestry on social status had declined significantly by World War I and that the mulatto elite's near monopoly on the upper ranks of black society was disappearing. Access to elite status, according to Frazier, became increasingly dependent on professional standing, education, and economic success. This transformation in the basis of social status and prestige was facilitated by the gradual extension of educational opportunities to the black masses, growing competition from white immigrants for service jobs historically held by mulattoes, and mass migration of southern blacks to urban areas (Landry 1987). The last created an enormous demand for black professionals to meet the needs of a rapidly increasing black population. As darker blacks became more educated and economically successful, they began to marry into the old mulatto families, and the complexion of the black elite darkened (Landry 1987). Although research conducted in black communities throughout the 1930s found color gradations in social standing (e.g., Drake and Cayton 1945; Davis et al. 1941) and an emphasis on light complexion as a desirable characteristic (Johnson 1941), these studies concurred with Frazier's assessment.

Social and economic opportunities have improved dramatically for blacks since the major works on skin tone and stratification were published. During the 1960s, educational, occupational, and income levels increased and the black middle class expanded (Farley and Allen 1987). Cultural nationalism, which emphasized pride in being black and the distinctive contribution of black music, literature, and history, swept across black America (Blackwell 1985). Moreover, among blacks, dark skin coloring lost its negative connotations and associated stereotypes. The term "black" became a unifying description of the entire race rather than a divisive term used in a derogatory manner to devalue darker members.

Given these social, economic, and attitudinal changes, it is reasonable to expect that Frazier's prediction that skin color would cease to be an important dimension of black stratification should have been realized. Two studies conducted at the height of the civil rights movement, however, do not support this expectation. Freeman et al. (1966), on the basis of interviews with black couples residing in Boston, reported a positive association between lightness of skin and wife's education, husband's

education, and husband's occupation. Ransford's (1970) study of black males in the Watts area of Los Angeles found that occupation and income were higher for light-skinned males at all levels of education below college graduation. Furthermore, among those with the lowest levels of educational attainment, the probability of being employed was lower for darker males. Among darker males, only those scoring low on subjective powerlessness were able to overcome the skin-color barrier. Ransford concluded that, because the returns to education were greater for lighter males, darker males still encountered greater discrimination in the larger society. Both studies, therefore, revealed that skin tone continued to affect socioeconomic status among blacks.

The Freeman et al. (1966) and Ransford (1970) studies were based on small, geographically specific samples, and the data were collected in the late 1960s. Perhaps the time lag had not been sufficient for the changes of the civil rights era to have made an impact. On the other hand, it is not known to what degree evaluations of black skin-tone differences have changed in the dominant society. Desegregation has increased the frequency and intensity of interracial contact. If whites, particularly in their roles as gatekeepers to jobs and education, continue to exercise color preferences, then we can expect skin color to influence black Americans' status attainment in spite of its diminished importance within the black community itself. It is also reasonable to hypothesize that to some extent the effects of past discrimination and the extension of privilege based on color are still operating. In the remainder of this article, we will examine whether, in fact, complexion continues to play a significant role in such stratification outcomes as educational attainment, occupation, and income among black Americans.

## METHODS

The data used in the analysis come from the 1979–80 NSBA. The sample for the survey was drawn according to a multistage-area probability procedure that was designed to ensure that every black household in the United States had an equal probability of being selected for the study. Within each household in the sample, one person aged 18 or older was randomly selected to be interviewed from among those eligible for the study. Only self-identified black American citizens were eligible for the study. Professionally trained black interviewers carried out all interviewing. We used data from the 2,107 respondents to operationalize skin tone and four stratification measures—education, occupation, personal income, and family income. Mother's occupation, father's education, sex, marital status, region, urbanicity, and age—correlates of stratification outcomes—were introduced as controls.

Values for skin tone were based on interviewers' observations of respondents' complexions. Interviewers rated respondents' skin color on a scale from one to five, with one indicating a very dark brown skin color and five denoting a very light brown or very light skin complexion. Interviewers classified 8.5% of the respondents as having very dark brown complexion, 29.9% as having dark brown, 44.6% as having medium brown, 14.4% as having light, and 2.6% as having very light skin complexion.<sup>2</sup>

Education and father's education were scored "less than grade school" = 4; "less than high school education" = 10; "high school or equivalent" = 12; "some college" = 14; and "college graduate or more" = 18.

Occupation and mother's occupation were divided into six different types of work: (1) manual labor or personal or domestic services, (2) operative or protective services, (3) crafts, (4) clerical, (5) management or sales, and (6) professional or technical. These occupational types were rank ordered and coded from one through six, with one indicating lower ranking jobs and six representing higher ranking occupations.

Each respondent was assigned scores that corresponded to the midpoint of his or her income category for both personal income and family income. A Pareto curve estimate was used to derive midpoints for respondents whose incomes fell in the highest, open-ended income categories (see Miller 1964). Codes ranged from \$0 through \$38,946 for personal income, and from \$0 through \$43,333 for family income.

Sex was divided between males (zero) and females (one). Marital status was dichotomized between those who were currently married (one) and those who were not (zero). Region of current residence was collapsed into two categories: South (one) and non-South (zero). For the urbanicity variable, respondents were categorized as urban (one) if they lived in a self-representing urban area. And each respondent's age was coded in years and ranged from 18 through 97 (for 97 years old and over).

## DATA ANALYSIS AND RESULTS

Does skin tone continue to be related to stratification outcomes? Figures 1–4 provide some preliminary evidence. These bar graphs present bivari-

<sup>2</sup> To our knowledge, the 1982 General Social Survey is the only other national, representative sample of black Americans that includes observations of respondents' skin colors. The distribution of skin tones in that sample was very similar on a five-part scale: 10.1% of respondents were classified as having a very dark brown skin complexion, 25.3% as having dark brown, 47.1% as having medium brown, 14.7% as having light brown, and 2.8% as having very light skin complexion. The number of black respondents in that data set, however, precluded our using it to test the hypotheses at hand in a multivariate framework.

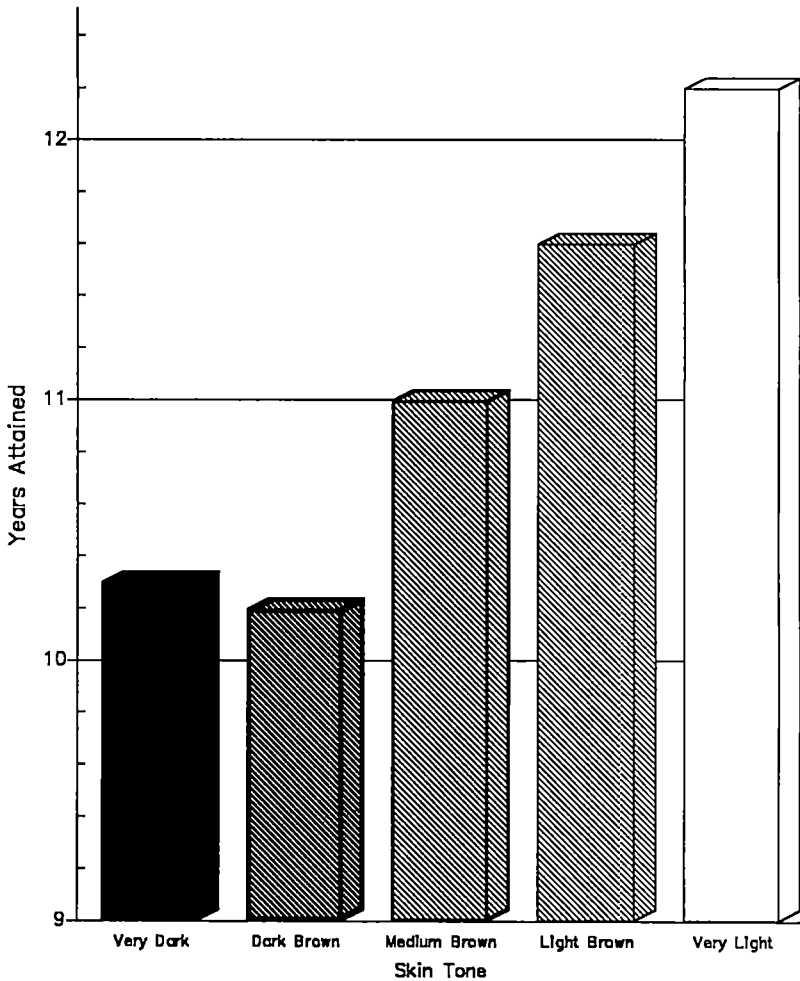


FIG. 1.—Educational attainment (in years) by skin tone: very dark = 10.3; dark brown = 10.2; medium brown = 11.0; light brown = 11.6; very light = 12.2.

ate relationships between skin color and stratification results. Figure 1, for example, presents mean levels of educational attainment by skin tone. We show in this graph that educational attainment does increase as skin color becomes lighter. Each unit of lighter skin color corresponds to about half an additional year of education. As we show in the figure, very light respondents attain on average more than two additional years of education than their dark brethren. These differences are statistically significant at  $P < .01$ .



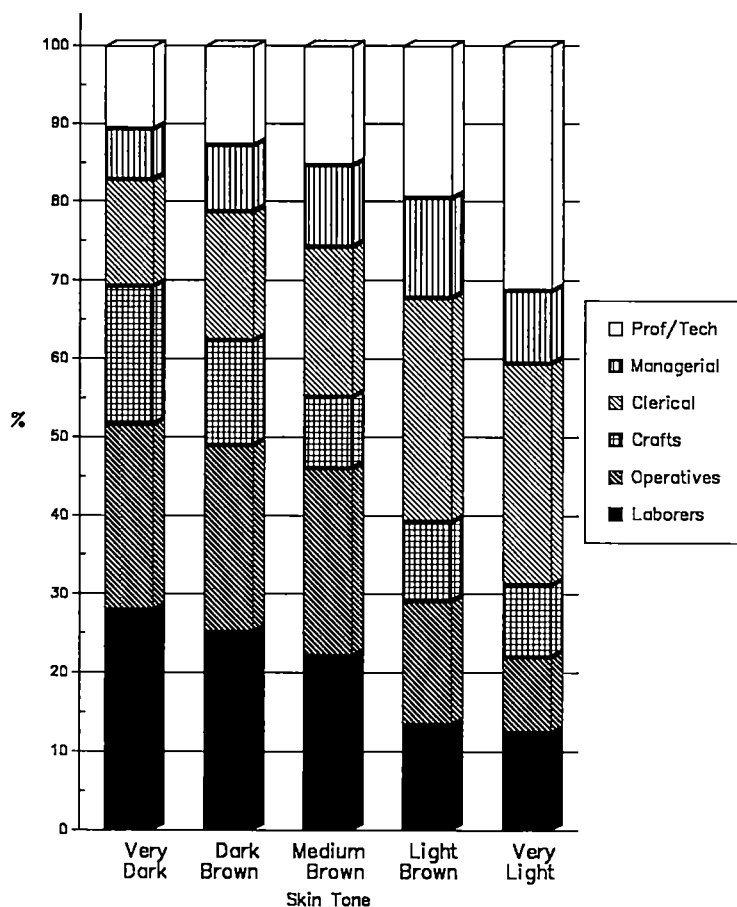


FIG. 2.—Occupational distribution by skin tone

In figure 2 we present the occupational distribution of blacks by skin tone. Again, it is evident that there are substantial differences in the kinds of jobs held by respondents with various skin tones. For example, very light respondents are substantially more likely to be employed as professional and technical workers than are those with darker complexions. In contrast, those with very dark complexions are more likely than all others to be laborers. Occupational differences by skin tone are also statistically significant at  $P < .01$ .

In figures 3 and 4, we show that similar patterns emerge with respect to color-related income distributions. Both personal and family income increase significantly with lighter complexion. On the family-income dimension, this relationship yields incomes for very light respondents

## Skin Tone and Stratification

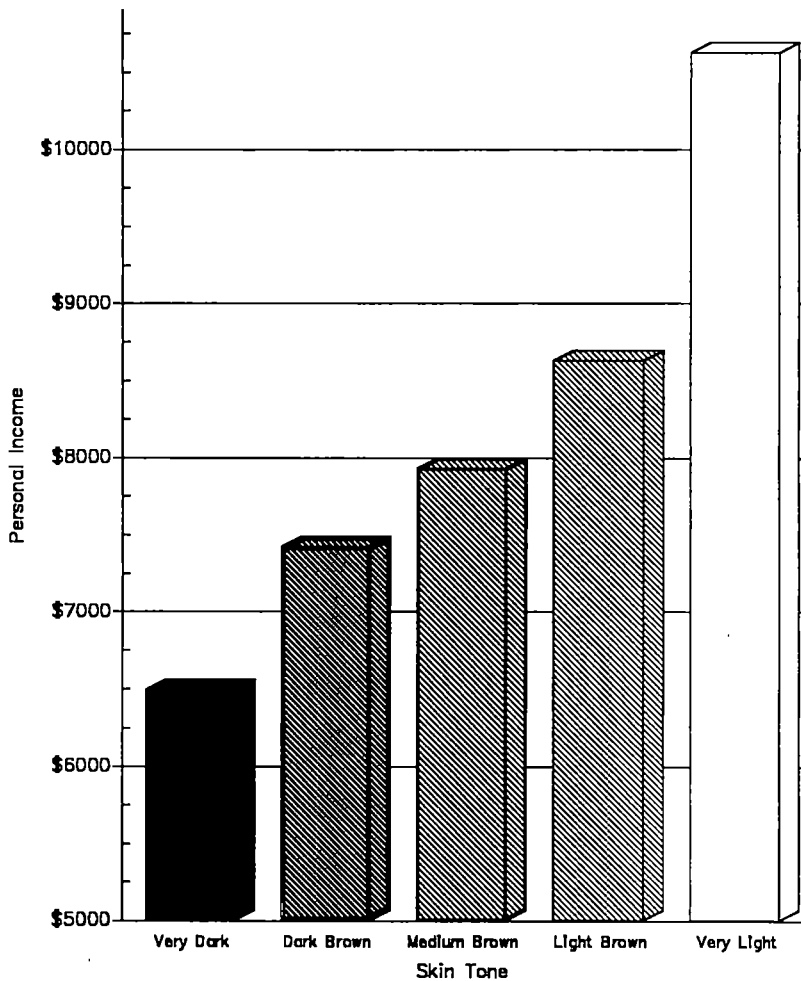


FIG. 3.—Personal income by skin tone: very dark = \$6,503; dark brown = \$7,427; medium brown = \$7,938; light brown = \$8,632; very light = \$10,627.

that are more than 50% greater than those for very dark respondents. When it comes to personal income, the differences are even greater, as incomes for very light respondents are nearly 65% higher than those of their very dark counterparts.

Although these results are telling and indicative of the magnitude of the discrepancies among blacks, they do not give us a complete picture of the relationship of skin tone to stratification outcomes. The preceding analysis provided us with only a glimpse of the gross differences that occur along the color spectrum. It did not take into account the interrela-

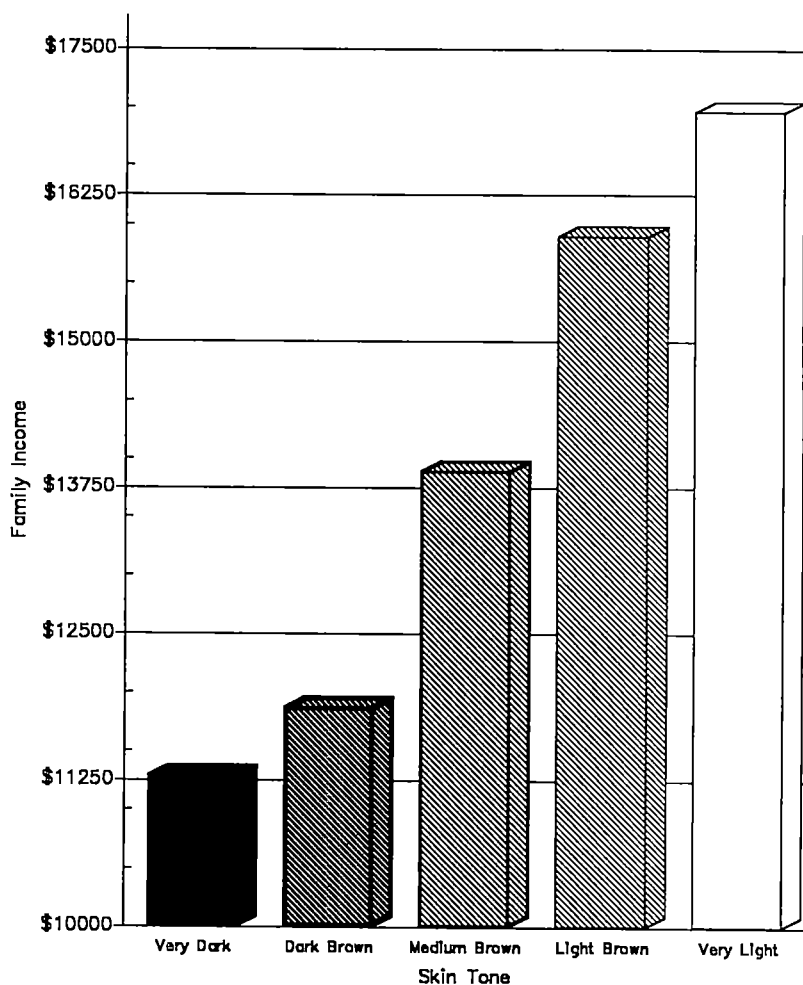


FIG. 4.—Family income by skin tone: very dark = \$11,303; dark brown = \$11,888; medium brown = \$13,900; light brown = \$15,907; very light = \$16,977.

tionships among these stratification variables. It also did not provide statistical controls for factors that mediate the effects of skin tone.

In order to assess the interrelationships of these variables, we used path analysis. Path analysis enables us to measure the direct and indirect effects of skin tone on the stratification outcomes. In addition, this technique allows us to examine the causal processes underlying the observed relationships. And finally, it allows us to determine the relative importance of alternative paths of influence.

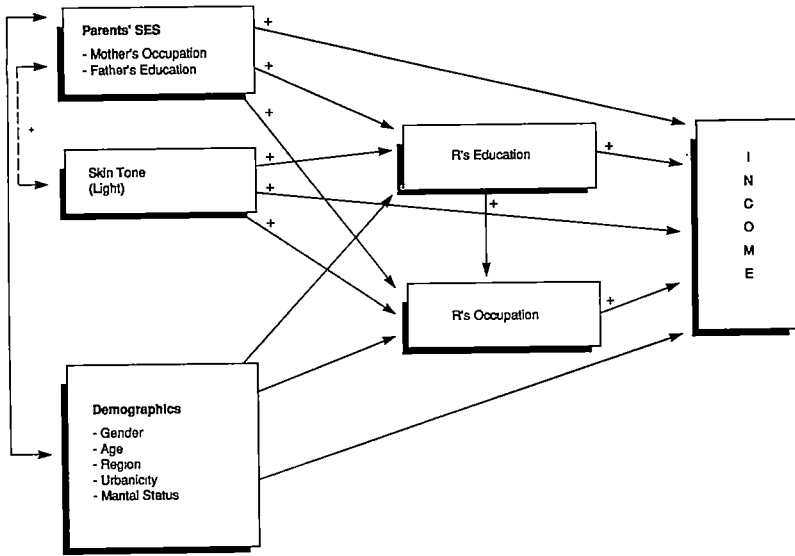


FIG. 5.—A conceptual model of the stratification outcomes of skin-tone variations among black Americans.

Figure 5 presents a conceptual diagram that illustrates the direct and indirect effects of skin tone on income (as well as education and occupation). Consistent with our discussion above, this conceptual model suggests that one's skin tone will (1) have a direct bearing on one's personal and family income, (2) affect one's personal and family income through the effect it has on educational attainment, and (3) influence one's personal and family income through the consequences it has on occupation (both directly and indirectly through the education-occupation nexus). These relationships are posited to exist net of the direct and indirect effects of parents' socioeconomic status and one's own sociodemographic characteristics.

But how accurate is this diagram? Does it capture the effects of skin tone on these stratification outcomes? Who, if anyone, does this sketch depict? Table 1 provides us with some answers to these questions. It presents skin tone as a predictor of such outcomes as educational attainment, occupation, and personal and family income. In each case, the coefficients are standardized and presented as beta weights that statistically control for the effects of the other correlates of stratification. For example, the table shows that skin tone has a statistically significant effect on educational attainment ( $P < .05$ ). In particular, net of the effects of parental socioeconomic status, sex, region, urbanicity, age, and marital status, educational attainment increases along with lightness of

TABLE 1

EFFECTS OF SKIN TONE ON STRATIFICATION OUTCOMES, NET OF OTHER DETERMINANTS OF INEQUALITY

| Independent Variables          | Education | Occupation | Personal Income | Family Income |
|--------------------------------|-----------|------------|-----------------|---------------|
| Skin tone .....                | .078**    | .096***    | .066**          | .072**        |
| Mother's occupation .....      | .082**    | -.013      | -.038           | .043          |
| Father's education .....       | .209***   | .001       | -.031           | .033          |
| Sex (female) .....             | .040      | -.065**    | -.322***        | -.177***      |
| Region (South) .....           | -.015     | .039       | -.126***        | -.130***      |
| Urbanicity (urban) .....       | .018      | .081**     | .053*           | .040          |
| Age .....                      | -.256***  | -.008      | .219***         | .037          |
| Marital status (married) ..... | .126***   | .066**     | .138***         | .246***       |
| Education .....                |           | .504***    | .307***         | .225***       |
| Occupation .....               |           |            | .248***         | .229***       |
| $R^2$ .....                    | .180***   | .299***    | .442***         | .341***       |
| $N$ .....                      | 621       | 621        | 621             | 604           |

\*  $P < .10$ \*\*  $P < .05$ \*\*\*  $P < .01$ 

complexion. The overall model explains 18% of the variance in educational attainment.

Similar results with respect to the effects of skin tone on occupation are displayed in table 1. Again, the results are consistent with expectations that lighter complexions would produce more favorable stratification results. Net of education, parental socioeconomic status, sex, region, urbanicity, age, and marital status, the fairer one's pigmentation, the higher his or her occupational standing ( $P < .01$ ). Though education is a much more important variable, skin tone proves to be more consequential than either of the indicators of parental socioeconomic status and all of the sociodemographic variables. The overall model accounts for about 30% of the variance in occupation.

We also show in table 1 that skin tone has significant effects on personal income, net of education, occupation, parental socioeconomic status, and such sociodemographic characteristics as sex, region, urbanicity, age, and marital status. While skin tone is again a more powerful predictor than urbanicity and parental socioeconomic status, it is not in this case as important as such attributes as sex, age, marital status, education, and occupation. The total model explains 44% of the variance in personal income.

The information in table 1 also suggests that family income is significantly related to skin color. In particular, the lighter the skin tone, the higher the family's income. This relationship is statistically significant

( $P < .05$ ) and is net of parental socioeconomic status, education, occupation, and the sociodemographic variables. The overall model accounts for 34% of the variance in family income.

In sum, it appears that skin tone has bona fide effects on such stratification outcomes as education, occupation, and income. In all cases, these effects are consistent with the idea that lighter skin complexions are associated with more favorable stratification consequences over and above those conferred by parental background and sociodemographic attributes.

But are skin tone and stratification outcomes related in the same manner for all blacks? Drake and Cayton (1945) argued that skin tone is more important for women than men. In order to address this issue, we examined the effects of skin tone on education, occupation, and personal and family income, net of parental socioeconomic status, region, urbanicity, age, marital status, and stratified by sex.

In table 2 we report the net effects of skin tone on the dependent outcomes for men versus women. Again, coefficients are presented as beta weights that statistically control for the effects of the other correlates of stratification. There appear to be some important similarities and differences by sex. Skin color acts as a significant stratifying agent in determining education, occupation, and family income for women only ( $P < .05$ ). It is a marginal factor in determining personal income for both men and women ( $.05 < P < .1$ ). The differential effects for family income are consistent with Drake and Cayton's belief that skin tone is more consequential for women than for men because of the role it has played in mate selection—that is, “successful Negro men . . . put a premium on marrying a woman who is not black or very dark brown. . . . Male partiality to [fair skin] color constitutes a social handicap for the very dark woman” (Drake and Cayton 1945, p. 498). (Lack of data concerning the skin tone of respondents' spouses precludes a direct test of this claim.)

We also carried out a multivariate analysis that examined the stratification effects of skin tone, stratified by region, by age, and by urbanicity. (Space limitations do not permit a full presentation of these results.) For the most part, our results (not presented here) indicated that not only did skin tone affect outcomes among blacks in general, but it also had differential consequences within the black community. Different skin color results occurred by such characteristics as sex, region, urbanicity, and age. In all instances of significant effects, however, lighter skin was associated with more positive stratification outcomes.

But what do relationships between skin tone and stratification outcomes mean? Explanations of the relationship between pigmentation and stratification are to be found in either contemporaneous structural and ideological factors (e.g., continuing disadvantage due to discrimination

TABLE 2  
EFFECTS OF SKIN TONE ON STRATIFICATION OUTCOMES OF MALES VERSUS FEMALES, NET OF OTHER DETERMINANTS OF INEQUALITY

| INDEPENDENT VARIABLES        | EDUCATION |          | OCCUPATION |         | PERSONAL INCOME |          | FAMILY INCOME |          |
|------------------------------|-----------|----------|------------|---------|-----------------|----------|---------------|----------|
|                              | Males     | Females  | Males      | Females | Males           | Females  | Males         | Females  |
| Skin tone .....              | .063      | .109**   | .048       | .079**  | .085*           | .067*    | .060          | .095**   |
| Mother's occupation .....    | .024      | .095**   | .077       | -.062*  | -.163***        | -.007    | -.046         | .109***  |
| Father's education .....     | .209***   | .206***  | -.089      | .020    | .100*           | -.091**  | .119*         | -.011    |
| Region (South) .....         | -.105*    | .034     | -.045      | .075*   | -.028           | -.160*** | -.063         | -.153*** |
| Urbanicity (urban) .....     | .003      | .015     | .107*      | .071*   | .127**          | .082**   | .100*         | .028     |
| Age .....                    | -.295***  | -.237*** | -.045      | -.016   | .320***         | .181***  | .189***       | -.006    |
| Marital status (married) ... | .082      | .130***  | .161**     | .010    | .201***         | .049     | .115*         | .304***  |
| Education .....              |           |          | .456***    | .533*** | .335***         | .271***  | .263***       | .215***  |
| Occupation .....             |           |          |            |         | .290***         | .388***  | .281***       | .229***  |
| R <sup>2</sup> .....         | .180***   | .186***  | .268***    | .322*** | .458***         | .374***  | .312***       | .340***  |
| N .....                      | 192       | 377      | 192        | 377     | 192             | 377      | 189           | 367      |

\*  $P < .10$

\*\*  $P < .05$

\*\*\*  $P < .01$

against and superexploitation of darker blacks) or antecedent factors (e.g., disadvantages derived from parents because of past discrimination against darker blacks). While our analysis cannot resolve such issues, it does provide some clues.

To the degree that parental socioeconomic status variables are correlated with stratification outcomes and skin tone, they may act as present-day proxies for the transmission of advantages and disadvantages from the past. In table 3 we show that, with the exception of the relationship between personal income and mother's occupation, parental socioeconomic status does have significant ( $P < .01$ ) zero-order correlations with all stratification outcomes in the predicted (positive) directions. However, these data also suggest that skin tone is not highly correlated with mother's occupation (.033) or father's education (.120). Moreover, when the effects of parental socioeconomic status on stratification outcomes are examined in a multivariate framework, the relationships are attenuated. As tables 1 and 2 indicated, these relationships change (often dramatically with significant sign reversals) when skin tone and sociodemographic factors are taken into account. Such results do not lend much support to the idea that it is primarily historical factors (by themselves) that produce disadvantage and unequal outcomes for people with differing pigmentations.

The results in tables 1 and 2, however, suggested that skin tone was consistently a more powerful determinant of such stratification outcomes as occupation and personal and family income than was parental socioeconomic status. Also, darker-skinned respondents in the NSBA were about twice as likely to report that they had been the victims of discrimination within the last month than were those with light skin complexions. Moreover, net of skin tone, other contemporaneous factors were consistently more powerful determinants of stratification outcomes than were background (i.e., parental socioeconomic status) variables. These facts support the view that differential treatment (i.e., greater discrimination against darker blacks) by whites as well as by other blacks continues to occur within this era; thus, it is clear that intraracial inequality has been perpetuated and created anew within the last quarter of the 20th century.

### SUMMARY AND CONCLUSIONS

We began this article by observing that skin tone has historically played a significant role in the social and economic standing of black Americans. During slavery, advantages went to mulattoes and other fair-skinned blacks. Through the years, the offspring of these lighter-skinned blacks have also realized relative advantage. With the rise of the modern civil rights movement and the black nationalism that accompanied it, how-



TABLE 3  
ZERO-ORDER CORRELATIONS OF SKIN TONE, PARENTAL SOCIOECONOMIC STATUS, AND STRATIFICATION-OUTCOME VARIABLES

| Variable                     | 1       | 2       | 3       | 4       | 5       | 6       | 7       |
|------------------------------|---------|---------|---------|---------|---------|---------|---------|
| 1. Skin tone .....           | 1.000** | .033    | .120**  | .127**  | .117**  | .090**  | .130**  |
| 2. Mother's occupation ..... |         | 1.000** | .254**  | .122**  | .082**  | -.002   | .077**  |
| 3. Father's education .....  |         |         | 1.000** | .338**  | .209**  | .105**  | .194**  |
| 4. Education .....           |         |         |         | 1.000** | .494**  | .389**  | .408**  |
| 5. Occupation .....          |         |         |         |         | 1.000** | .476**  | .434**  |
| 6. Personal income .....     |         |         |         |         |         | 1.000** | .684**  |
| 7. Family income .....       |         |         |         |         |         |         | 1.000** |

\*  $P < .05$

\*\*  $P < .01$

ever, evaluations of "blackness" ostensibly changed among black Americans in such a fashion that being dark no longer carried stigma or penalty. White standards were to be rejected in favor of those that incorporated pride in blackness.

To say that blacks started thinking differently about their blackness, however, is not the same as saying that the consequences of having a particular skin shade disappeared. Indeed, this study found that complexion continued to be a significant predictor of such outcomes as educational attainment, occupation, and income among black Americans. Moreover, our analysis showed that skin tone and other contemporaneous factors were more strongly related to stratification outcomes than were such background characteristics as parental socioeconomic status. Virtually all of our findings parallel those that occurred before the civil rights movement. These facts suggest that the effects of skin tone are not only historical curiosities from a legacy of slavery and racism, but present-day mechanisms that influence who gets what in America. Future research will need to specify the reasons and processes by which skin-tone variations continue to affect stratification outcomes among black Americans and whether these patterns exist for other racial and ethnic groups.

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3

# Late Nineteenth- and Early Twentieth-Century Childlessness<sup>1</sup>

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In some northeastern states, levels of childlessness approached 30% for women born in the mid-19th century. Other states in the South and West had levels of 6%–8%. Nationally, childlessness increased across cohorts born in the latter part of the 19th century. Nonmarriage and delayed marriage account for some of this variability. But the argument here is that fertility control within marriage played a major role in producing these differentials. Both the intercohort and cross-sectional differentials in childlessness match differentials in higher parity births, suggesting that fertility control was practiced most in the times and places where childlessness was greatest. Furthermore, “own-children” methods are used to present evidence of fertility control *among childless women early in marriage*. The argument is not that young women born in the mid-19th century intended to be childless at young ages; it is instead that they were willing and able to postpone childbearing. With fertility delay came experience and circumstances that made it less likely that women would ever marry and/or have children. These arguments are basically the same as those used to account for contemporary childlessness in the United States.

Recent trends toward later and less childbearing in developed countries have attracted much scholarly and popular attention. In the United States, for instance, roughly half of the white women born in the early to mid-1950s were childless at age 25 and as many as 20% are expected to remain childless (Rindfuss, Morgan, and Swicegood 1988). A common assumption is that this trend is unprecedented and represents a largely

<sup>1</sup> An earlier version of this article was presented at the annual meetings of the American Sociological Association, August 9, 1989. Special thanks to Deanna Pagnini who produced some of the figures and tables in this paper, to Mark Hereward and Doug Ewbank who assisted in the construction of some data files, and to Susan Watkins who gave detailed comments on several different drafts. Gretchen Condran, Doug Ewbank, Sam Preston, Stewart Tolnay, Ronald Rindfuss, Tamara Hareven, and several *AJS* reviewers also made useful comments on previous drafts. This research was supported by NICHD grant R01 HD22099-01.

secular phenomenon: a decline in the importance of parenthood. Wilkie (1981) has called recent and rather dramatic increases in delayed child-bearing a “new” strategy adopted by highly educated women interested in careers. Others have cited a new generation interested in consumerism and self-actualization as an explanation. The following is a list of reasons for remaining childless given by the *close acquaintances* of childless couples:

|                     | Number | Percentage |
|---------------------|--------|------------|
| Self-centered       | 180    | 31         |
| Wife's career       | 128    | 22         |
| Economic pressure   | 96     | 16         |
| Health              | 51     | 9          |
| Dislike of children | 49     | 8          |
| Miscellaneous       | 36     | 6          |
| Eugenics            | 27     | 5          |
| Marital discord     | 15     | 3          |

While these data seem to fit perfectly the contemporary characterization of childless couples, they are taken from an article published in 1936 and referred to women born at the turn of the century (Poene 1936, p. 470). The sample was one of convenience and I present it here only to caution against a hasty conclusion that current behavior is new and revolutionary. In fact, evidence to the contrary exists. Some research on late 19th-century fertility finds evidence of voluntary childlessness (Tolnay and Guest 1982) and fertility delay or spacing (Anderton and Bean 1985; Ewbank 1989). In addition, current levels of fertility delay and childlessness are similar to those observed during the Great Depression and are not especially high by current European standards (Rindfuss et al. 1988).

I argue, counter to Wilkie, that there exists a strong cultural and historical continuity in the process producing childlessness. Marriage and fertility delay are time honored and culturally approved strategies in the United States. Furthermore, childlessness in the past, as in the present, was most often caused by a series of postponements. To preview the evidence, I used information from the 1900 census and later censuses to document levels of childlessness that varied greatly by birth cohort and by state. Childlessness levels for women born in the mid-19th century were more than 20% in the Northeast while levels half that high were found elsewhere. Some women were childless because they never married; others were childless because they married so late that they may not have been able to bear children. But, like Tolnay and Guest (1982), I believe a substantial proportion of the childless women practiced fertility

control within marriage. To support this claim I show that lower risks of third and later births were strongly associated with higher levels of childlessness across both time and space. Declines in the frequency of higher parity births in this period are universally attributed to voluntary control of fertility within marriage. At the very least then, this evidence shows that childlessness appeared in the same periods and locales where fertility control was practiced most widely. Finally, if my argument is correct, then women at the turn of the century must have been willing and able to delay childbearing from the very beginning of marriage. By applying own-children methods to 1910 census data, I show sharp regional and occupational fertility differences for women who married just after the turn of the century. As in the contemporary period, it was women of higher socioeconomic status who were most likely to postpone childbearing.

#### PROPORTION CHILDLESS BY BIRTH COHORT: 1836–1955

Figure 1 shows the percentage of childless white women for a series of birth cohorts spanning more than a century. Data from two distinct data sources are presented: vital registration and the series of decennial censuses (see the Appendix for sources and comparison of these cohort series). The census series covers earlier cohorts, prior to the initiation of a vital registration system. The vital registration estimates have been projected for cohorts who have yet to complete the childbearing years. Although Bloom (1982) and Evans (1986) use different projection methods, their estimates are quite similar.

While there are some differences in the trends from these two sources (see the Appendix for discussion), the most visible feature, the cyclical pattern, is unmistakable. Childlessness increased to a peak for those in the childbearing years during the Great Depression, cohorts born in the years 1901 to 1910 (birth cohort 1901–10), and then fell to historic lows for cohorts that produced the baby boom (birth cohort 1925–34). Post-baby-boom birth cohorts are expected to match the highest levels previously observed in this series (see Rindfuss et al. 1988).

The census series can be decomposed into two separate parts: nonmarriage and childlessness within marriage. For cohort 1836–1935, our examination of these components reveals dissimilar patterns. Figure 2 shows that the percentage never married and the percentage childless within marriage increased slightly and together until birth cohort 1861–65.<sup>2</sup> Later cohorts showed an increasing divergence with this per-

<sup>2</sup> A description of the sources and procedures used in constructing this series may be had upon application. Also, see the Appendix.

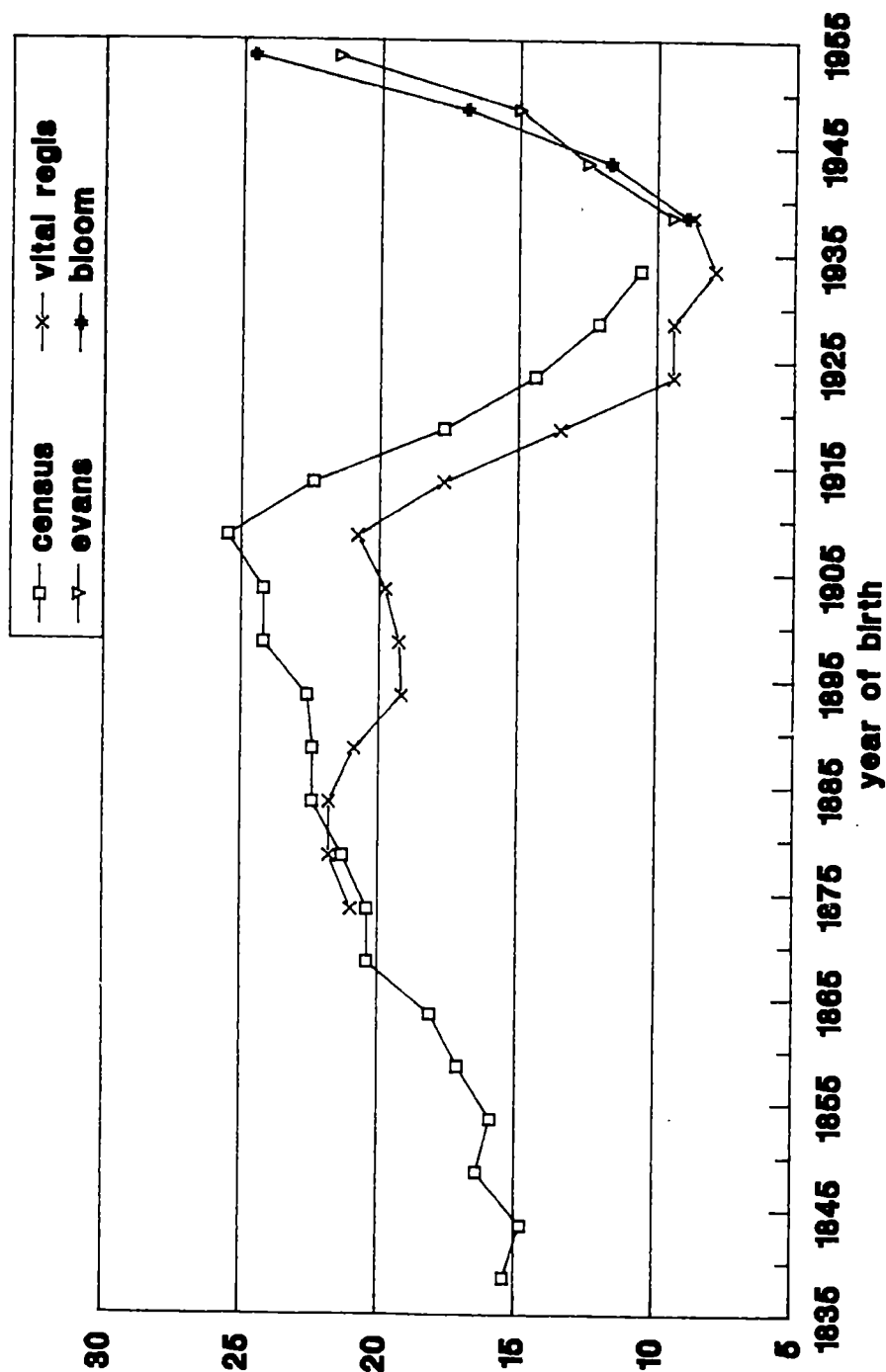


FIG. 1.—Percentage childless by cohort of white women 45 years old and older

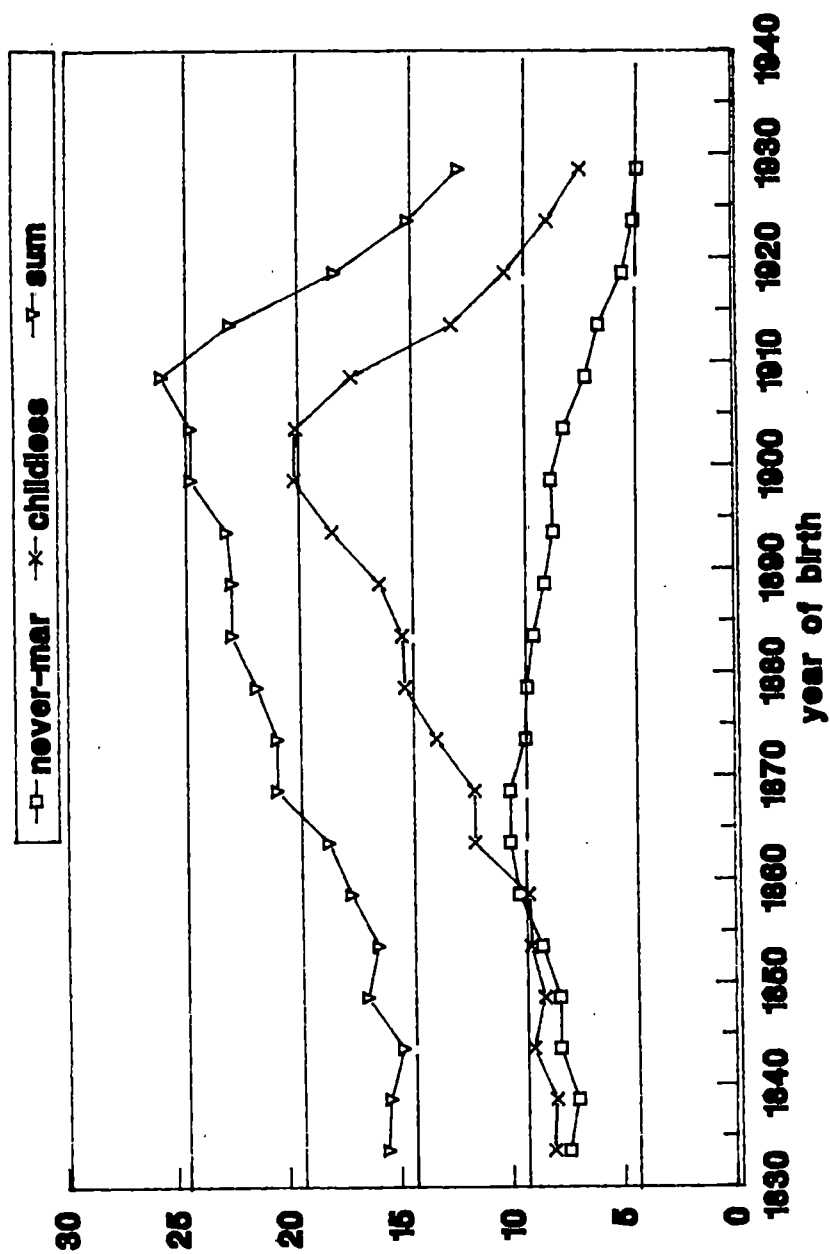


FIG. 2.—Never married and marital childlessness by cohort for white women over 45.



centage never marrying falling slowly and marital childlessness increasing sharply. Beginning with cohorts born after 1900, the two components again converge. Thus, for cohorts born later than 1861–65, childlessness fluctuated independently of nonmarriage, and marital childlessness was clearly the component driving overall childlessness trends.

#### STATE DIFFERENTIALS IN CHILDLessNESS

Figure 1 shows a clear trend toward greater childlessness across cohorts born in the latter half of the 19th century. Published census data allow me to examine state variability in childlessness for the 1861–65 cohort, those aged 45–49 in the census years of 1910. Table 1 shows these data. States are ordered by estimated level of childlessness. Oklahoma had the lowest percentage of childless women, 5.7%, and New Hampshire the highest, 32.1%. This is an enormous range. The first question is: Can these state differences be explained by different proportions marrying? The third column of table 1 shows the percentage of childless women among the ever married. The percentage of childless declines, of course, and the range is attenuated somewhat. Utah had the lowest percentage of childless (3%) and New Hampshire the highest (19%). But the variability remaining among states is large. Inspection of each state's rank on the two measures reveals great similarity.

Although the data are not shown here, the same general points could be made from data for the 1891–95 cohort, except that the variability across states was reduced. The range of values was reduced for this later cohort because childlessness increased in states where it had formerly been very low. For the earlier cohort (1861–65), childlessness was as low as 6% in Oklahoma and below 10% in seven states. For the 1891–95 cohort, the lowest observed levels belong to Utah (12%) and only five states had levels below 15%. At the other extreme Rhode Island had the highest rate of childlessness (31%) for the 1891–95 cohort. This was not much different from the level observed for Rhode Island's 1861–65 cohort (28%) or the highest level observed among all states in 1910 (32% for New Hampshire).

For both cohorts, when the proportion ever married is controlled for, only some of the state variability in childlessness is explained. Marital disruption (separation, divorce, or widowhood) could also be an important factor. To test whether state variability in marital disruption helps explain state variability in childlessness, I estimated the proportion childless among once-married, spouse-present women using data from the 1910 Census Public Use Sample (PUS; see Strong et al. 1989). These data show no attenuation of state differentials if analysis is confined to intact, first marriages (data not shown here).

TABLE 1  
PERCENTAGE CHILDLESS FOR ALL WHITE WOMEN AND FOR EVER-MARRIED  
WHITE WOMEN BY STATE: 1861-65<sup>a</sup>

| STATE                | ALL WOMEN     |            | EVER-MARRIED WOMEN |            |
|----------------------|---------------|------------|--------------------|------------|
|                      | Childless (%) | State Rank | Childless (%)      | State Rank |
| Oklahoma .....       | 5.7           | 1          | 4.1                | 2          |
| Utah .....           | 8.1           | 2          | 3.2                | 1          |
| Idaho .....          | 8.2           | 3          | 5.3                | 7          |
| Arkansas .....       | 8.4           | 4          | 4.3                | 3          |
| Texas .....          | 8.6           | 5          | 4.6                | 4          |
| South Dakota .....   | 8.7           | 6          | 5.1                | 5          |
| North Dakota .....   | 9.1           | 7          | 5.9                | 9          |
| Kansas .....         | 11.8          | 8          | 6.9                | 16         |
| Nebraska .....       | 12.0          | 9          | 6.8                | 15         |
| New Mexico .....     | 12.2          | 10         | 8.2                | 26         |
| Wyoming .....        | 12.2          | 11         | 8.1                | 24         |
| Washington .....     | 12.9          | 12         | 8.9                | 29         |
| Montana .....        | 12.9          | 13         | 8.6                | 28         |
| Minnesota .....      | 13.0          | 14         | 7.0                | 20         |
| Tennessee .....      | 13.0          | 15         | 6.2                | 12         |
| Wisconsin .....      | 14.0          | 16         | 6.3                | 13         |
| Mississippi .....    | 14.0          | 17         | 7.1                | 21         |
| South Carolina ..... | 14.2          | 18         | 5.2                | 6          |
| Georgia .....        | 14.2          | 19         | 5.8                | 8          |
| Alabama .....        | 14.3          | 20         | 5.9                | 10         |
| Oregon .....         | 14.3          | 21         | 9.6                | 32         |
| Florida .....        | 14.3          | 22         | 8.4                | 27         |
| Missouri .....       | 14.5          | 23         | 7.0                | 19         |
| Iowa .....           | 14.6          | 24         | 6.9                | 18         |
| North Carolina ..... | 15.5          | 25         | 6.1                | 11         |
| Michigan .....       | 15.7          | 26         | 9.8                | 33         |
| Arizona .....        | 15.8          | 27         | 12.0               | 39         |
| Colorado .....       | 16.2          | 28         | 10.7               | 37         |
| West Virginia .....  | 16.6          | 29         | 8.1                | 25         |
| Kentucky .....       | 16.7          | 30         | 7.4                | 22         |
| Indiana .....        | 16.9          | 31         | 9.9                | 34         |
| Louisiana .....      | 17.2          | 32         | 6.9                | 17         |
| Illinois .....       | 17.4          | 33         | 9.3                | 31         |
| Delaware .....       | 17.5          | 34         | 6.3                | 14         |
| Virginia .....       | 18.7          | 35         | 7.4                | 23         |
| Pennsylvania .....   | 19.8          | 36         | 9.0                | 30         |
| Nevada .....         | 19.9          | 37         | 15.7               | 46         |
| Ohio .....           | 20.2          | 38         | 10.4               | 35         |
| New Jersey .....     | 21.1          | 39         | 11.7               | 38         |
| Vermont .....        | 21.7          | 40         | 13.4               | 43         |
| California .....     | 21.8          | 41         | 13.0               | 41         |
| Maryland .....       | 22.5          | 42         | 10.5               | 36         |
| New York .....       | 24.3          | 43         | 12.7               | 40         |
| Maine .....          | 24.8          | 44         | 14.9               | 45         |
| Connecticut .....    | 26.0          | 45         | 14.3               | 43         |
| Rhode Island .....   | 28.3          | 46         | 14.4               | 44         |
| Massachusetts .....  | 30.0          | 47         | 16.3               | 47         |
| New Hampshire .....  | 32.1          | 48         | 19.3               | 48         |

<sup>a</sup> Source.—U.S. Bureau of the Census (1943, table 32).

Controlling for the proportion who never marry and for marital disruption does not remove all of the potential influence of marriage patterns on childlessness. It may be that the high levels of childlessness came about because women delayed marriage so long that they were unable to have children after they married. More precisely, it is well-known that fecundity (i.e., the ability to reproduce) declines with age (see Menken 1985). The decrease is moderate in a woman's twenties but is much more rapid in her late thirties. If there were sharp differences in age at marriage across states, then childlessness would be higher where marriage was later because fecundity, on average, was lower and because the length of exposure to the risk of childbearing (before menopause) was shorter.

Published data do not allow for refined tests of the effects of different ages at marriage on levels of childlessness for the 1861-65 cohort, so we have turned to the 1910 PUS. But the PUS sample is not large enough to produce reliable state estimates of childlessness by age at marriage for the 1861-65 cohort. So I use data for additional cohorts (1856-65) and compare regions instead of states. These regions capture the well-known, historical gradient toward higher fertility as one moved west and south from New England.<sup>3</sup>

Table 2 compares the actual amount of childlessness with the amount that we would expect, given what is known about the decline in fecundity with age. "Standard" levels of childlessness are given in the last column on the right: for each age at marriage, this is the expected proportion who would never bear a child if this group experienced the "natural fertility rates" estimated from historical populations (Menken and Larsen 1986, table 5). These rates assume no deliberate control of marital fertility (due to contraception or induced abortion) and capture the maximum biological effects of aging on fecundity (see Menken 1985).<sup>4</sup>

The difference in levels of childlessness between the U.S. regional groups can now be separated into two parts: that due to different rates of childbearing within marriage and that due to different age-at-marriage distributions. The rates and marriage distribution for the New England

<sup>3</sup> The factors responsible for this gradient are in dispute (see Smith 1987). But the specific question here does not require a resolution to this debate. The more narrow question addressed here is whether regional differentials in marital childlessness can be accounted for by variation in age at marriage.

<sup>4</sup> To estimate the effects of age on reproductive capacity (fecundity) one needs to examine the association between age and fertility in the absence of any attempts to limit births. Contemporary populations who do not use contraception are not appropriate study populations because such groups are almost certainly selected for low fecundity. Historical populations provide the most useful populations for this purpose. But the "historical evidence . . . sets upper bounds to the biological clock, since even in (these) populations . . . some childlessness could have been voluntary" (Menken 1985, p. 472).

TABLE 2

FREQUENCY DISTRIBUTION (N) AND CHILDLESSNESS RATES (%) BY AGE AT MARRIAGE FOR U.S. REGIONS AND CHILDLESSNESS RATES FOR HISTORICAL EUROPEAN POPULATIONS

| AGE AT MARRIAGE                            | U.S. REGIONS |      |              |      |               |      |        |      | NATURAL FERTILITY<br>STANDARD, HISTORICAL<br>EUROPEAN<br>POPULATIONS (%)‡ |      |       |   |
|--|--------------|------|--------------|------|---------------|------|--------|------|---|------|-------|---|
|  | New England  |      | Mid-Atlantic |      | North Central |      | South* |      |   |      | West† |   |
|  | N            | %    | N            | %    | N             | %    | N      | %    |   |      | N     | % |
|  |              |      |              |      |               |      |        |      |   |      |       |   |
| 15-19 .....                                | 109          | 5.5  | 317          | 2.5  | 630           | 1.6  | 557    | 1.4  | 120   | 2.5  | 2.08  |   |
| 20-24 .....                                | 200          | 12.0 | 570          | 6.5  | 1058          | 6.2  | 617    | 3.9  | 175   | 5.7  | 6.0   |   |
| 25-29 .....                                | 108          | 25.0 | 253          | 11.9 | 442           | 11.8 | 252    | 7.5  | 75  | 20.0 | 10.0  |   |
| 30-34 .....                                | 34           | 44.1 | 83           | 28.9 | 116           | 21.6 | 87     | 11.5 | 31  | 29.0 | 15.0  |   |
| 35-39 .....                                | 12           | 66.7 | 43           | 48.8 | 66            | 42.4 | 46     | 37.0 | 17  | 41.2 | 28.0  |   |
| 40-44 .....                                | 10           | 90.0 | 25           | 80.0 | 31            | 71.0 | 25     | 64.0 | 10  | 90.0 | 63.0  |   |
| All ages at marriage .....                 |              | 18.8 |              | 10.8 |               | 8.7  |        | 5.9  |   | 12.4 |       |   |
| Predicted using standard<br>schedule ..... |              | 8.4  |              | 8.2  |               | 7.5  |        | 7.3  |   | 8.4  |       |   |

SOURCE.—Tabulation from the 1910 PUS. Table includes all once-married, native white women aged 45-54.

\* Includes the census regions South Atlantic, East-South Central, and West South.

† Includes the census regions Mountain and Pacific

‡ Average of eight historical populations: Ireland (1911), Scotland (1911), Quebec (before 1876 and 1876-85), England (19 parishes and Quakers), France (Tourouvre-av-Perche and Crulai). See Menken and Larsen (1986).

§ Menken and Larsen (1986) do not present an estimate for those married at age 15-19. I use 2%, which is close to the estimate for all regions except New England.

region produce the observed 18.8% level; 5.9% of women in the South were childless. The row labeled "predicted using the standard schedule," gives the expected proportion childless if this group, with its observed age-at-marriage distribution, had experienced the natural fertility rates estimated from historical populations. Seven percent of those in the South would have been childless had they experienced the rates suggested by Menken and Larsen (1986), a figure very close to the 6% observed for this population. The New England states, by contrast, had levels of childlessness (18.8%) that greatly exceeded 8%—levels that would be predicted by observed age-at-marriage distributions and Menken and Larsen's best estimates of age caused infertility. Tolnay and Guest (1982) reached the same conclusion based on an analysis of data from the 1900 PUS.

In sum, there was great variability in childlessness by state, especially for the birth cohort 1861–65. Some of this variability can be explained by less and later marriage. But for states primarily in the Northeast, levels of childlessness were too great to be explained by late marriage, marital disruption, or nonmarriage.

#### CHILDESSNESS AND FERTILITY CONTROL AT OTHER PARITIES

By the turn of the century family limitation was widespread in some parts of the United States. Indirect evidence comes from the fact that fertility rates declined with age more rapidly than in standard, historical populations where there was no deliberate control of marital fertility (Ewbank 1989; David and Sanderson 1987). Presumably, this sharper decline at older ages occurred because couples controlled their fertility once they had all of the children they wanted. But fertility control at the older ages would not, of course, account for childlessness by itself: childless women avoid childbearing early in marriage as well as late. I can, however, use evidence of fertility control at older ages (or higher parities) to probe further into the process by which women were childless when they finished their reproductive years. If there was an association between low and high parity progression ratios (e.g., the proportion reaching parity  $x$  who have at least  $x + 1$  children) then it would seem more reasonable to consider early and late childbearing (or its avoidance) as a part of the same process that led to the overall decline in fertility.<sup>5</sup>

<sup>5</sup> Tolnay and Guest (1982, table 4) address a similar question by correlating the proportion childless with the number of children ever born, for states. Our test is stronger since parity progressions are independent measures. In contrast, the mean number of children ever born and childlessness are seriously confounded measures.

Stated differently, if childlessness and fertility control appeared together across cohorts and across states then we will be more confident that childlessness was voluntary. Part of the reason is that effective control is clearly a prerequisite for marital childlessness and control at other parities makes it apparent that methods of control were known and available.

To determine if childlessness was greatest for cohorts characterized by greater fertility control beyond parity 1, I plotted (in fig. 3) the proportion of married women who had at least one child ( $P_0$ ) by the proportion who already had two children and went on to have at least three ( $P_2$ ).<sup>6</sup> Note that these parity progression ratios decline together. The growth of the two-child family increased with increasing childlessness. Substituting other parity progressions (for  $P_2$ ) produced very similar patterns (data not shown here). Such a simultaneous decline in parity progression ratios has been observed for some Western European populations as well (see Festy 1984).

Figure 4 shows the same estimates for state data. Specifically, using data for the 1861–65 cohort (those aged 45–49 in 1910), I plotted  $P_0$  against  $P_2$  for states.<sup>7</sup> Again the figure shows a strong positive association between childlessness and, given two births, not having a third child.<sup>8</sup>

### Was There Fertility Control at Parity Zero?

Above I showed that childlessness accompanied fertility differences at other parities across time and space. Differences at higher parities are universally ascribed to fertility control. Why not just assume that women were willing and able to control fertility from the very beginning of marriage? The answer is that the differences could be due to sterility caused by poor health or disease (although such explanations tend to be relatively unimportant in accounting for overall levels and differentials

<sup>6</sup> Data come from Heuser (1976) and the 1900 and 1910 PUS data. Details are available on request.

<sup>7</sup> Parity progressions for states are computed from parity distributions in the U.S. Bureau of the Census (1945). Details available on request.

<sup>8</sup> Some demographers would maintain that a better measure of fertility control at higher parities is the widely used Coale-Trussell index  $m$ . The statistic  $m$  measures the degree of fertility control assessed indirectly from age-specific marital rates compared with a natural fertility standard. Thus for states, I compared childlessness (for the 1860–65 cohort) with state estimates of  $m$ . Using 144 observations for whites (48 states for urban, rural-nonfarm, and rural-farm populations) childlessness is clearly associated with greater control as measured by  $m$  ( $r = .66$ ). Ewbank (1988) demonstrates this point in much greater detail.

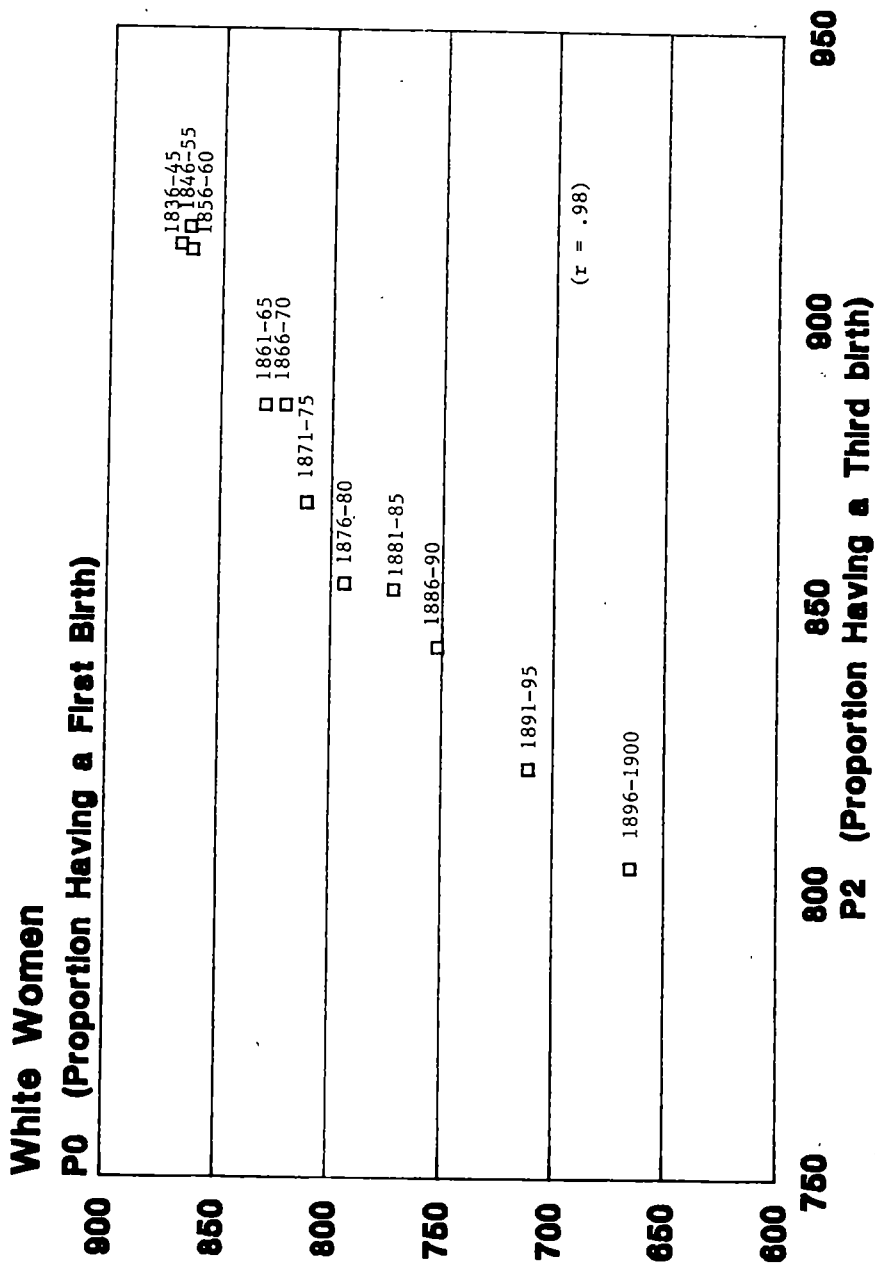


FIG. 3.—Plot of  $P_0$  by  $P_2$  for birth cohorts 1836-45 to 1896-1900

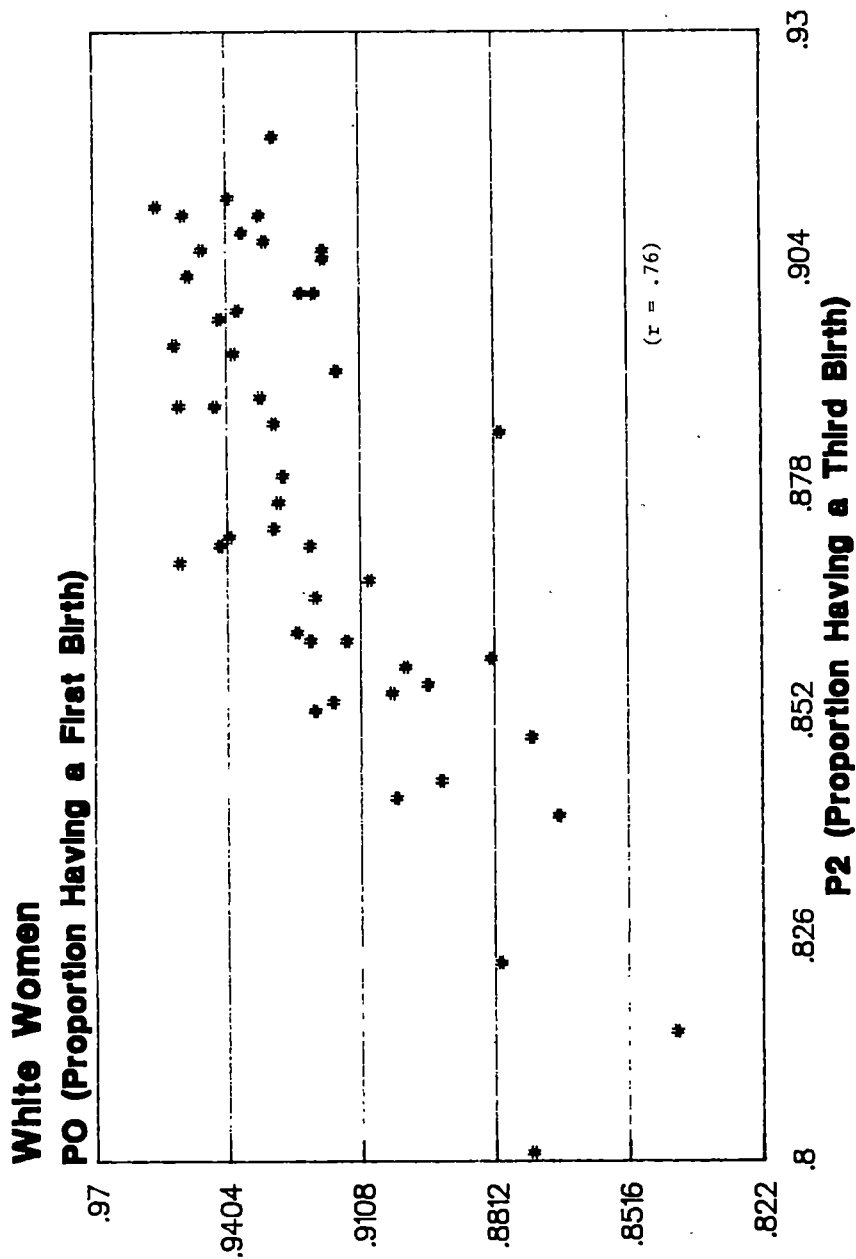


FIG. 4.—Plot of  $P_0$  by  $P_2$  by state



in fertility).<sup>9</sup> In addition, many see no reason why women in this period would have been motivated to remain childless. I will address that issue in the discussion and summary. I will address the sterility issue by examining fertility differentials early in marriage by showing that the groups with the lowest fertility were the groups that were most advantaged in health, the higher socioeconomic groups. Such evidence argues against a sterility argument.

For this analysis my focus switches from women who have completed the childbearing years with no children (a cohort measure) to women who have avoided childbearing between 1907–10 (a period measure). The birth cohorts contributing most to fertility in this period, those at the heart of the childbearing years, would have been the 1876–90 birth cohorts. The question is whether, in this period, I can show sharp fertility differentials early in marriage between different regions and between groups defined by the husband's occupation? For such evidence, I turn to the 1910 PUS and own-children fertility procedures.

#### Own-Children Measurement of Fertility Using the 1910 PUS

Among women married four or more years, I identify those who have no children aged three or less living with them. (The procedures used to link children to mothers are described in Strong et al. [1989]). These women are assumed to have borne no children in the previous four years between 1907 and 1910. There are well-known problems with such an assumption. First, some children will have died and thus cannot be counted as currently living with their mother. I have adjusted for mortality at the individual level by taking advantage of the information contained in the 1910 census on children ever born and children surviving. If a woman reports more children born than children surviving then I assign the dead child a birth date (and the mother an age at the dead child's birth).<sup>10</sup> In this way, children who have died can be included in the retrospective

<sup>9</sup> See Bongaarts and Potter (1983, pp. 14–17). The major exception would be pathological sterility presumably caused by pelvic inflammatory diseases (resulting from sexually transmitted diseases such as gonorrhea). There is no evidence that such diseases were widespread among the white population at the turn of the century.

<sup>10</sup> Usually in own-children analysis, mortality adjustments are made at the aggregate level. We have taken advantage of the information on the mortality experience of individual women to adjust for mortality at the individual level. In brief, it is necessary for a deceased child to be fit into the surviving sibship so that his or her birthdate can be estimated and the birth order of other children determined. Such adjustments are required only if the number of children ever born (CEB) is greater than the number of children surviving (CS). See Ewbank, Morgan, and Watkins (1990) for a description of this procedure.

fertility history that I construct. A second problematic feature of own-children analysis is that some children do not live with their mothers. Living away from mothers is rare for children under age five and does not vary significantly across regions for native-born women.<sup>11</sup> Thus no adjustment was made for children living away.

## Results

Table 3 shows the percentage of women who apparently have had no children in the previous four years by current marriage duration, parity four years before, and region of current residence. These women were aged 19–53 in 1910 (birth cohorts 1857–91).

I show the two most dissimilar regions (New England and the South) here to make my points most clearly.<sup>12</sup> Note first of all that there were sharp differences in the early marital fertility of New England and Southern women. For those recently married and childless four years before, nearly one-third of New England women avoided childbearing over the ensuing four years of marriage; the comparable figure in the South was 21%. Regional differences appeared at other parities but at longer marriage durations.

The tendency to remain at current parity increased with increasing duration of marriage. This tendency was strongest at parities zero and one and occurred because those who remain at lower parities were increasingly selected to be better contraceptors and/or to have very low fecundity.

The last important observation: at the longest durations shown the regional differences were very small (especially at the low parities). This pattern of differential change (the proportion remaining childless increases more rapidly with marital duration for Southern women than for New England women) would be produced if New England women were controlling fertility more than Southern women. As marriages age, the women with higher fecundity were selected out of these low parities. This occurred much more rapidly in the population controlling fertility

<sup>11</sup> Children not living with mothers would not be enumerated in the same household and thus could not be "linked" to a resident mother. From birth to the age of four, 2.7% of white native children of native parents were not linked to a resident mother. This suggests that fertility is underestimated by about 3%. I make no adjustments here and argue that the adjustment of 3% would be too great for married couples with spouse present. Children are most likely to live apart from mothers when mothers are divorced, separated, or widowed (see Morgan et al. 1990).

<sup>12</sup> Regions are defined as described in notes to table 2. Again my goal here is not to identify the factors that lie behind the regional contrast but to show that the fertility differences are concentrated early in marriage.

TABLE 3

PERCENTAGE OF WOMEN NOT HAVING A CHILD IN PREVIOUS FOUR YEARS, BY PARITY FOUR YEARS BEFORE, CURRENT REGION OR RESIDENCE, AND CURRENT MARRIAGE DURATION

| MARRIAGE<br>DURATION    | ZERO PARITY |     |    |       |     |     | PARITY 1    |       |       |     | PARITIES 2-4 |       |       |   |
|-------------------------|-------------|-----|----|-------|-----|-----|-------------|-------|-------|-----|--------------|-------|-------|---|
|                         | New England |     |    | South |     |     | New England |       | South |     | New England  |       | South |   |
|                         |             |     |    |       |     |     |             |       |       |     |              |       |       |   |
|                         | %           | N   |    | %     | N   |     | %           | N     | %     | N   | %            | N     | %     | N |
| 4-5 years .....         | 32          | 96  | 21 | 21    | 721 | 33  | 12          | 34    | 80    | 4   | 40           | 48    |       |   |
| 6-8 years .....         | 72          | 80  | 55 | 267   | 31  | 54  | 21          | 680   | 55    | 20  | 27           | 328   |       |   |
| 9-11 .....              | 78          | 82  | 82 | 164   | 54  | 41  | 45          | 266   | 51    | 68  | 24           | 841   |       |   |
| 12-15 years .....       | 90          | 89  | 91 | 115   | 69  | 39  | 69          | 144   | 61    | 95  | 31           | 1136  |       |   |
| More than 16 years .... | 98          | 98  | 97 | 189   | 96  | 174 | 94          | 174   | 87    | 383 | 65           | 3082  |       |   |
| All durations .....     | 68          | 372 | 43 | 1,883 | 67  | 243 | 41          | 1,344 | 77    | 570 | 49           | 5,435 |       |   |

NOTE.—\* No estimate presented when  $N < 10$ .

least (Southern women).<sup>13</sup> Thus, at longer marital durations, the Southern sample becomes heavily subfecund. It would therefore be impossible for Northeastern women to have maintained their much lower fertility vis à vis such an increasingly subfecund sample of Southern women.

While the above is consistent with greater fertility control in the Northeast, I am unable to shake the possibility that the observed differences could be due to pathological sterility. The same pattern of differential change (smaller differences at longer marital durations) would be produced if the New England women were more subfecund at the beginning of marriage. Differential fertility, because Southern women were more fecund, would be attenuated at longer durations of marriage as the two groups became increasingly (and similarly) subfecund.

Table 4 is similar to table 3 except that husband's occupation is substituted for region (women of all regions are included).<sup>14</sup> I contrast professionals with farmers, but very similar results appear if I substitute service and sales occupations for professionals and laborers for farmers. Husband's occupation is the best measure of social status available from the 1910 census. If I find lower fertility for the higher status groups, then such involuntary causes as poor health or disease become less tenable because high-status groups were advantaged with respect to health. Equally important, high-status groups are generally leaders in the control of marital fertility. Lower fertility for married women of high status (many of whom have substantial education) implies that these women (compared with those of lower status) had the skills, knowledge, and resources to more effectively control their fertility.<sup>15</sup> High-status women are also the ones most likely to delay fertility in the contemporary period (see Wilkie 1981; Rindfuss et al. 1988).

Table 4 shows sharp occupational differences. Women with professional husbands were much more likely to avoid a birth over this four-year period than were wives of farmers. As above, these differentials were much greater at short marital durations. Although not shown here these results for region and husband's occupation persist if both are ana-

<sup>13</sup> Our discussion assumes differential change (by marriage duration) in the likelihood of avoiding a birth by region (and, in table 5, by husband's occupation). Formal tests for a change in the odds of avoiding a birth for four years show statistically significant differential change at parity zero and one (if the first two duration categories are contrasted with the latter three).

<sup>14</sup> Strong et al. (1988) coded the reported occupations in the 1910 PUS, using 1910, 1950, and 1980 classifications. In this article, I use the 1980 occupation codes and define "professionals" as those having codes 0–200 (primarily managers and professionals). Farmers are identified by codes 473–499 (primarily farmers and farm workers, but including foresters and fishermen).

<sup>15</sup> I am indebted to an anonymous reviewer for encouraging a stronger statement regarding the differentials by women's status.

TABLE 4  
PERCENTAGE OF WOMEN NOT HAVING A CHILD IN PREVIOUS FOUR YEARS, BY PARITY FOUR YEARS BEFORE, HUSBAND'S CURRENT  
OCCUPATION, AND CURRENT MARRIAGE DURATION

| MARRIAGE<br>DURATION     | ZERO PARITY  |     |        |       | PARITY 1     |     |        |       | PARITIES 2-4 |       |        |       |
|--------------------------|--------------|-----|--------|-------|--------------|-----|--------|-------|--------------|-------|--------|-------|
|                          | Professional |     | Farmer |       | Professional |     | Farmer |       | Professional |       | Farmer |       |
|                          | %            | N   | %      | N     | %            | N   | %      | N     | %            | N     | %      | N     |
|                          |              |     |        |       |              |     |        |       |              |       |        |       |
| 4-5 years .....          | 39           | 236 | 21     | 908   | 60           | 15  | 31     | 81    | *            | 8     | 52     | 59    |
| 6-8 years .....          | 70           | 172 | 40     | 443   | 50           | 131 | 21     | 699   | 56           | 52    | 27     | 357   |
| 9-11 years .....         | 84           | 88  | 72     | 162   | 58           | 98  | 48     | 274   | 48           | 122   | 27     | 953   |
| 12-15 years .....        | 96           | 76  | 94     | 142   | 75           | 79  | 66     | 189   | 58           | 191   | 34     | 1,290 |
| More than 16 years ..... | 99           | 128 | 98     | 256   | 94           | 132 | 93     | 302   | 85           | 690   | 70     | 4,054 |
| All durations .....      | 69           | 700 | 46     | 1,911 | 69           | 455 | 46     | 1,545 | 74           | 1,063 | 54     | 6,713 |

\* No estimate presented when  $N < 10$ .

lyzed simultaneously.<sup>16</sup> Thus the sharpest contrasts are found by comparing New England women with professional husbands with wives of Southern farmers. For those at parity zero four years ago, 47% of the former group and 17% of the latter avoided a birth for the subsequent four years of marriage.

### Methods of Fertility Control

While substantial indirect evidence of voluntary control early in marriage exists, one obvious question arises: How did Americans control their fertility in the latter part of the 19th century? The earliest modern fertility surveys (which collected data on birth-control use) focused on women born between 1901 and 1910 or on those married in the late 1920s.<sup>17</sup> These birth and marriage cohorts had very low fertility and high levels of childlessness. A broad range of methods were used by these women with many reporting first use in the period between marriage and the first birth (Dawson et al. 1980; Westoff et al. 1953).

What about women from an earlier generation? On the basis of their analysis of the Mosher data, David and Sanderson (1986) stressed the importance of the diaphragm, condom, infrequent coitus, and abortion in the late 19th century. Using such sources as diaries, Degler (1980) claimed that coitus interruptus and abstinence were common means. Both diaries and the Mosher data refer to use of the "safe period." But since accurate knowledge of the ovulatory cycle was not available until the second decade of the 20th century, it could not have been an important mechanism for most cohorts I examine.

I have no new evidence to present on the methods couples used. I am also skeptical about the possibility of a firm conclusion, given that the only data sources are extremely selective and, therefore, make generalizing to the U.S. population highly suspect. Nevertheless, the issue is cru-

<sup>16</sup> Estimated percentage childless for region and occupation groups with marriage duration controlled for are based on predicted values from a logistic regression. Details are available on request. These results remain much the same if I place an additional control on age (with the exception that marital duration effects are sharply attenuated).

<sup>17</sup> The earliest American cohorts covered by modern fertility surveys are the birth cohort 1901–10 (Dawson, Meny, and Ridley 1980) and the marriage cohorts of 1927–29 studied by Whelpton, Kiser, and colleagues (see Westoff, Herrera, and Whelpton 1953). Both studies show substantial use of condoms, diaphragms, contraceptive douches, withdrawal, and rhythm. Few abortions were reported, but the low fertility of these cohorts coupled with these relatively ineffective means implies substantial use of abortion (see Dawson et al. 1980, pp. 85–86). Also relevant for our arguments is that both studies show substantial contraceptive use at early birth intervals. Dawson et al. (1980, table 4) report half of those who ever used contraception began use in the interval between marriage and the first birth.

cial since childlessness resulting from voluntary delay, the mechanism I suggest, requires effective means. So below I make several rough calculations (on the basis of information from Bongaarts and Potter [1983]) that give some sense of the level of control necessary to produce these levels of childlessness.

In table 2 I showed that roughly one third (32%) of New England women who had been married four or five years earlier were still childless in 1910. Given the relatively late age at marriage in this region, roughly 8% could be assumed to be sterile at marriage. Let us further make the liberal assumption that the 32% figure is 4% too high because some children were not enumerated with their mothers (see n. 9 above). How effective does contraception have to be in order for roughly 20% ( $32\% - 8\% - 4\%$ ) of the women to remain married four years without bearing a child?

To answer this question several concepts need to be introduced. Fecundability ( $f$ ) is the monthly probability of conception. It can be disaggregated into natural fecundability ( $f_n$ , fecundability in the absence of contraception) and residual fecundability ( $f_r$ , fecundability with contraceptive use). Using these concepts the effectiveness of contraception is simply  $1 - (f_r/f_n)$ .

Estimates of natural fecundability are inexact, but .20 is expected for married cohabiting populations who are not using contraception (Bongaarts and Potter 1983). Residual fecundability must be well below this level in order for 20% of women to have not conceived and had time to bear a live birth within four years. If  $f_r = .05$  for the entire population of married couples married in 1905 and 1906, then 20% would not have conceived within 39 months; and, with nine months' gestation, 20% would not have had time to carry a birth to term by 48 months of marital duration. Since roughly one out of five recognizable conceptions is spontaneously aborted, a 20% increase in fecundity provides adjustment for our purposes.<sup>18</sup> Thus, for the sample of New England women, an average  $f_r = .06$  seems reasonable.

Thus aggregate contraceptive effectiveness must be in the range of .70 ( $1 - [.06/.20]$ ). Modern populations obtain contraceptive effectiveness levels of roughly .9 with the condom and diaphragm. If women at the turn of the century did as well, then 78% ( $.78 \times .9 = .70$ ) would have

<sup>18</sup> To assess whether a 20% increase in fecundity would compensate for spontaneous abortions, I carried out a simple simulation. A constant .06 level of fecundity is set. Each conception carries a .2 probability of being spontaneously aborted (see Bongaarts and Potter 1983). If the conception is aborted, a delay of three months is set before the woman is again at risk of conception. Each woman is allowed only one spontaneous abortion. Given these assumptions and no risk prior to the ninth month of marriage, 20.8% are childless at the end of 39 months.

had to have been using contraceptives in order to produce the .70 aggregate level. Such a level, 78% of women using contraception at 90% effectiveness, seems unreasonable.

Another possibility is that natural fecundability was much lower than .20. Coital frequency is the primary determinant of natural fecundity. The .20 level assumes "normal" levels of intercourse, two to three times a week. Demographers generally assume that coital frequency varies little across populations (see Bongaarts and Potter 1983) but there are instances when it seems that very low coital frequencies could affect fertility levels (see Rindfuss and Morgan 1983). How infrequent would intercourse have to be in order for  $f_n = .06$ ? The answer is roughly twice a month (see Bongaarts and Potter 1983, table A.2). Degler (1980, chap. 9) has argued that women were exercising control over marital intercourse in this period and that one reason for avoiding it was to lower fertility. But no one has suggested that this low level of coital activity (twice a month) would be widespread. However, infrequent coitus may have been part of a set of strategies used by turn-of-the-century wives to postpone additional births (see David and Sanderson 1986). If coitus was once a week as opposed to the "normal" range of two to three times a week, then  $f_n = .13$  and the proportion of the population using contraception would drop to 51%—still a very high level.

Given the limited effectiveness of techniques mentioned so far, abortion likely played a role in producing childlessness. Degler (1980, chap. 10) claims abortion was common throughout the 19th century and was a major mechanism for controlling marital fertility. But restrictions on abortion in the late 19th century did make abortions more difficult to obtain than had been true earlier in the century (Gordon 1976; Mohr 1978). Finally, abortion can have an additional effect on childlessness in that pelvic infections and infertility are possible sequelae (McFalls and McFalls 1984).

## DISCUSSION AND SUMMARY

An important clue for explaining marital childlessness is that childlessness differentials matched fertility differentials at higher parities across time (i.e., cohorts), space (i.e., states and regions), and social groups (i.e., categories of husband's occupation). These results show that marital childlessness occurred in times and places characterized by greater fertility limitation. To return to the question posed earlier: Why not just accept at face value that women were controlling fertility at all stages of family formation? The answer is that many would contest this explanation because they see little motivation for women at the turn of the century to try to remain childless. These observers equate fertility control



with the desire for no more children. I, too, see little rationale for women to choose (permanent) childlessness when they are young and, in consistency with contemporary models of childlessness, I reason that women delayed marriage and childbearing, which led eventually to nonmarriage and childlessness.

Subsequent discussion focuses on two issues raised by this report. First, what factors might have led to fertility delay at the turn of the century? And second, how do these arguments relate to current debates about the nature of the fertility transition?

### Factors Causing Delay

Fertility delay can be seen most profitably as part of a *process* leading to childlessness. At the turn of the century there were, I argue, reasons or rationales for postponing marriage and childbearing. First, given the ineffective means of birth control available, women may have postponed births as a long-term strategy to ensure fewer children (Anderton and Bean 1985). Nevertheless, those who were successful at postponing births may have developed interests and life-styles that, by competing with childbearing, encouraged further delay. Such a series of postponements is presumed to be the primary process producing childlessness in the contemporary United States (see Rindfuss et al. 1988). Also, in the aggregate, delay brings older ages and longer exposure to the risk of disease. Both increase the risk of subfecundity and sterility.

Others may intentionally delay fertility for more immediate reasons; the primary consideration being to not have a child at this time. The Western normative context legitimates such life-course strategies (see MacFarlane 1986). Moreover, some conditions make this scenario more likely than others. In the 19th century, conflict between familial roles and work roles for women was so great that few married women worked outside the home. Women had to choose career *or* family. Large proportions of the professional women of the time were unmarried, and, of those who married, many were childless. A 1913 sample of 880 prominent women, many of them professionals, showed that roughly half were not married and, of the married women, only half had children (Jensen 1973; also see Kiser and Schacter 1949). The tension between work and family was resolved in favor of family for most women, but the desire to continue working was likely a major rationale for childlessness. But even for those who did not continue to work for pay after marriage, "middle class wives increasingly spent time outside the confines of the domestic sphere"; this "widening of the wives' sphere" may have encouraged fertility limitation within marriage (Mason, Weinstein, and Laslett 1987, p. 499).

Harsh economic conditions could also foster delays in marriage and childbearing if the normative contexts define such delays as appropriate. In the Northeast, for the cohorts born at midcentury, daughters who worked in mills may have been very important income earners. Pressure for them to marry may have been replaced by pressure to continue supporting the family. Salaff (1976) has described such a scenario for Hong Kong and Alter (1987) for the Belgium community of Vivaries. The Depression hit the turn-of-the-century cohort as their members moved into their late 20s and early 30s. This social and economic crisis was widely credited with disrupting and delaying patterns of family formation. The pervasive influence of this national economic crisis matches the pervasive increases in childlessness (see Rindfuss et al. 1988). Similarly, the earlier cohort examined here (birth cohort 1861–65) could have been affected by the more brief but harsh depression of the 1890s.

This scenario raises the question, Why did age at marriage and parenthood drop so precipitously after World War II? This is perhaps the more appropriate question since this period shows the greatest historical discontinuity (see fig. 1). Perhaps the answer can be found in the overlay of several very pronatalist factors: (1) fertility and marriage delay during the war and Depression was, to some extent, made up, (2) very favorable economic conditions existed, especially when compared with the harsh referent of the Depression, and (3) a set of social programs (such as the GI bill and Social Security) aided family formation (Modell, Furstenberg, and Strong 1978; Rindfuss et al. 1988).

### Implications and Arguments for Our Understanding of Family and Fertility Change

The standard description of the fertility transition posits that fertility control was adopted for stopping (not spacing) purposes first (Knodel 1977, 1979). Thus, fertility fell first and fastest for those at older ages and parities. This view was codified in the Coale-Trussell  $M$  and  $m$  indices that indirectly measure natural fertility and fertility control, respectively (see Coale and Trussell 1974, 1978). Likewise, at the conceptual level, Easterlin and Crimmins (1985) operationalized demand for fertility control as the excess of extant births to births desired. Thus, one is motivated to control fertility only when actual family size exceeds the desired size.

Results presented in this paper do not fit this description very well. Admittedly the fertility transition in the United States (especially in the Northeast) was well under way by the late 19th century. But our results clearly show fertility control *early in marriage* by the turn of the century. Results presented by others also challenge the traditional description. For

example, contraceptive use has increased in parts of Africa. However, the increase is often observed at all parities and ages, suggesting that it is used primarily as a substitute for long periods of sexual abstinence (see, e.g., Bertrand, Bertrand, and Malonga 1983). Some qualitative work supports this explanation: the major rationale given by women for using contraception is to promote spacing, not to limit the number of children (see Caldwell and Caldwell 1987). Among mid-19th-century Mormons, evidence suggests intentional spacing at low parities (Anderton and Bean 1985). Tolnay and Guest (1984) find little evidence of differential spacing using the 1900 PUS, but they do report evidence of spacing at the lowest parities in counties characterized by a high degree of industrialization. Finally, data accumulated for some European countries by Festy (1984) show, as we do here, that childlessness increased at roughly the same time and pace as declines in higher parity births. This evidence suggests that some revisions should be made in our description of the onset of family limitation.

I believe that family limitation can represent a novel idea or practice (Knodel and van de Walle 1977). But the way in which this novel idea/practice is used depends on the normative context and the prevailing period conditions. That is, individuals or families will use this innovation to adapt to exigencies they confront. They will adapt in a manner that requires the least institutional adjustment (see Davis and Blake 1956). The traditional description, positing control only at high parities or ages, fits (1) a fertility transition where period conditions are favorable for family formation, but the disadvantages of large families are growing or (2) a normative context that tightly integrates marriage and childbearing and pressures everyone into marriage. Much of Asia may fit this second scenario: age at marriage may rise but almost all eventually marry and have children. On the other hand, Western nations allow great flexibility in the timing of marriage and parenthood (Watkins 1984; Rindfuss et al. 1988). In such contexts the timing of marriage and parenthood are susceptible to adjustment depending upon prevailing conditions. Economic development, mass schooling, and other changes associated with modernization, no doubt, increase the cost of children and lead individuals to control the number of children they have. But, given a social context that allows flexibility, to assume that persons will not use fertility control to address other exigencies makes little sense. In fact, current life-course work suggests that *when* an event occurs (parenthood or marriage, for example) can be as important as *whether* it occurs in its effect on subsequent events. If individuals perceive the importance of timing (i.e., they are motivated), have means available, and live in a context that sees such actions as legitimate choices, meeting these criteria would make Ansley Coale's (1973) three preconditions for fertility control apro-

pos for spacing. Moreover, in terms of behavior, the relevant action for postponing and stopping is the same—not “to permit the next ovulation to come to fruition” (Ryder 1973, p. 503).

In the end then, for women born in 1860 and 1960 I stress commonalities in the process producing childlessness.<sup>19</sup> Women in these cohorts lived in a cultural context where niches for unmarried and childless women existed and where manipulating the timing of marriage and childbearing were normatively approved life-course strategies. Delayed childbearing in the United States is not a new strategy adopted only by educated women interested in careers; rather, it is a time-honored strategy for adapting to socioeconomic change. When pressured to change, individuals and families do not consider the full range of possible responses. Instead, their cultural context provides them with a set of options consistent with the broader social fabric of norms and values. Delaying marriage and childbearing is one of these options. Thus, the most general lesson from this study is that contemporary family change can often be viewed profitably, not as a “new response,” but as an “old response” to new exigencies.

## APPENDIX

Vital registration estimates were constructed by totaling birth certificates for given classes of mothers and then estimating appropriate populations at risk from census data (Heuser 1976). Although 20 states were not in the reporting area for the earliest vital registration estimates shown here, demographers have substantial confidence in this series (Ryder 1980).

Published data from the 1980, 1970, 1960, 1950, 1940 and 1910 censuses (see U.S. Bureau of the Census 1983, 1973, 1964, 1955, 1945, and 1943, respectively) along with estimates from the 1/750 Public Use Sample from the 1900 census manuscripts (Graham 1980) and a similar 1/250 sample from the 1910 manuscripts (Strong et al. 1989) are used to produce estimates shown in figure 1. Data for 1900, 1910, and 1940 are published for both native-born white women and for all white women. Figure 1 shows childlessness for all white women. But childlessness would be consistently higher if only native women were considered (because of immigrant women's lower rates of childlessness).

The series of censuses provides multiple estimates of childlessness for many cohorts. These allow for consistency checks but do not really ad-

<sup>19</sup> One relevant feature that has changed is the birth-control methods that are available. The more effective, coitus-independent methods reduce the “costs” and increase the effectiveness of fertility-control efforts. As a result they may make fertility delay and lower fertility more likely (see Bumpass 1973).

dress possible biases, such as failure to report all births. These multiple measurements do suggest that reliable childless estimates can be obtained from quite old women (also see Grabill, Kiser, and Whelpton 1958, p. 402). Where there are multiple observations for a single cohort, I calculated a mean estimate that is plotted in figure 1. (Actual data and additional comments on constructing this series are available from the author on request.)

While the trends from the two series are similar, the census series shows consistently higher levels of childlessness. Census estimates frequently show lower fertility (in this case greater childlessness) because some births are not reported. Illegitimacy contributes to census underreporting since never-married women were assumed to be childless in the census data but not in the vital registration estimates. However, illegitimacy is not a major reason for the discrepancy in the two series since most who had children, especially those in the earlier cohorts, married by the end of their childbearing years. Thus they would have been asked about their number of children ever born (Grabill et al. 1958).

Close inspection of the two series suggests a convergence for the earlier cohorts. We suspect there is a relatively constant tendency for census estimates to overestimate childlessness—some births are not reported. This tendency is counterbalanced for the earlier cohorts because of the disproportionate numbers of the “no reports” to queries on children ever born caused by the enumerator’s failure to write down “0” children (see El Badry 1961). Instead, counter to written instructions, some enumerators evidently left the appropriate space on the census schedule blank, implying, they assumed, childlessness. Coders, however, treated the blank as missing data. In fact, evidence for this type of error led to a new enumeration schedule in the 1950 census that had a box that was to be checked if the women reported no children (Grabill et al. 1958, pp. 402–3). Our estimates suggest bias from this source lowers national estimates of childlessness by 1%–2%. (Details on request from the author).

A third factor that would bias census childless estimates downward (relative to vital registration estimates) for the earlier cohorts is the larger number of immigrants in these cohorts. The vital-registration estimates exclude births to immigrants that occurred prior to immigration; the census estimates include them. Since immigrants are less likely to be childless, their inclusion lowers the census estimates relative to those from vital registration.

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# Learning to Cooperate: Stochastic and Tacit Collusion in Social Exchange<sup>1</sup>

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The Prisoner's Dilemma formalizes the social trap that arises when individually rational choices aggregate with mutually undesirable consequences. The game-theoretic solution centers on the opportunity for tacit collusion in repeated play. However, not all actors grasp the strategic implications of future interaction. Accordingly, this study reformulates the game as a stochastic learning model in which the behavior of interdependent actors is continually shaped by sanctions and cues generated by their interaction. Computer simulations of a two-person game show that adaptive actors are led into a social trap more readily than are fully rational actors, but they are also better at finding their way out. Prosocial norms appear to be a consequence rather than cause of cooperation but useful in promoting forgiveness of random deviance. The model is then elaborated as an *N*-way Prisoner's Dilemma. Simulations show how the effects of network size, density, mobility, and anonymity derive from a fundamental principle of collective action, that is, the need to reduce the number of choices that must be fortuitously coordinated in order to escape noncooperative equilibrium. The results also suggest how network structure might evolve in tandem with the cooperation it facilitates.

With the resurgence of sociological interest in the microfoundations of collective action, game theory has attracted the attention of sociologists working within a rational choice paradigm (Coleman 1986; Heckathorn 1988, 1989; Oliver 1984; Diekmann 1985). The point of departure in these studies is the paradox of social order among rational egoists whose pursuit of immediate gain leads to mutually suboptimal outcomes, or "social traps" (Platt 1973).

The problem of social traps may be formalized as a Prisoner's Dilemma in which the two players must choose between cooperation (*C*) or defection (*D*), a situation that generates a matrix with four possible outcomes

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|           |   |           |          |
|-----------|---|-----------|----------|
|           |   | Player 2: |          |
|           |   | C         | D        |
| Player 1: | C | $R = +1$  | $T = +2$ |
|           | D | $S = -2$  | $P = -1$ |

FIG. 1.—Payoff matrix for Prisoner's Dilemma

for the allocation of the payoffs—reward ( $R$ ), temptation ( $T$ ), sucker ( $S$ ), and penalty ( $P$ )—as indicated in figure 1.

A typical illustration of this matrix is the exchange of resources for mutual gain ( $R$ ) or to prevent a mutual loss ( $P$ ). Each side stands to gain even more by taking more than they give ( $T$ ), and risks being cheated by those who “free ride” on their willingness to sacrifice ( $S$ ). The numbers  $\pm 1$  and  $\pm 2$  in figure 1 are arbitrary; so long as the payoffs conform to the inequality  $T > R > P > S$ , rational players will choose  $DD$ . The paradox is that they both would be better off picking  $C$ , yet whatever their opponent's choice,  $D$  offers the better payoff. If player 1 picks  $C$ , player 2 is better off picking  $D$  ( $T = 2$ ) than  $C$  ( $R = 1$ ), and if player 1 picks  $D$ , player 2 is still better off picking  $D$  ( $P = -1$ ) than  $C$  ( $S = -2$ ). Being rational, our two optimizers both pick  $D$  and receive  $P$ , the next-to-worst outcome for each. Rational choice theory thus provides a compelling account of how cooperation can suffer from what Hardin (1982, p. 6) calls “the back of the invisible hand.”

This in turn poses a new puzzle: How do we explain the fact that social cooperation nevertheless seems to thrive? The rational choice solution requires that the game be ongoing, giving rational actors a *stake in the future*—an interest in avoiding acts that may incite retaliation as well as those that invite exploitation. An effective strategy for engineering a tacit collusion with a rational opponent must show that one is nice enough to be trusted but not so nice as to be taken advantage of (Axelrod 1984).

Those enlightened with sufficient foresight will thus appreciate both the futility of trying to exploit an equally sober interactant and the need to quickly retaliate against anyone tempted to test their resolve.

### I. SOCIAL LEARNING THEORY AND RATIONAL CHOICE

The rational choice solution is elegant and appealing, particularly as it applies to collaboration between entrepreneurs, legislators, unionists, and other skilled negotiators. However, lay contestants may not always grasp why the single-play strategic solution to Prisoner's Dilemma does not obtain in an indefinite series (a game without a dominant strategy). They may be unwilling or unable to (1) estimate the probability of future engagements, (2) estimate the probability of being recognized by former (perhaps "faceless") interactants (3) appreciate the strategic implications of an ongoing interaction for inducing tacit collusion, and (4) place sufficient confidence in the capacity of their interactants to see the light. How might cooperation emerge among those whose self-interest is less prescient or who heavily discount an uncertain future?

There is an additional problem. When fitted with rationalist assumptions, game theory tends to reduce cooperation to the unintended by-product of the instrumental pursuit of private gain, an explanation that resonates very poorly with what we continually observe in social life: cooperation is typically accompanied by overt expressions of group solidarity. How might actors learn to cooperate not out of self-interest (however enlightened or "properly understood") but out of attachment to prosocial norms?

These limitations may explain the reluctance of sociology to share the enthusiasm for game theory shown by other disciplines. Still, this study is premised on the conviction that game theory is ideally suited to sociological concerns, although not in the way that is usually supposed. According to the conventional wisdom, "Underlying the entire structure of game theory is the key assumption that players in a game are *rational* (or *utility maximizers*)" (Zagare 1984, p. 7; emphasis in original). Although mixed-motive games can be useful for modeling strategic behavior, rational choice hardly exhausts the range of mechanisms by which payoffs might influence choices, as biological applications based on Darwinian theory clearly demonstrate (Maynard-Smith 1982). The game's "key assumption" is not rationality, it is instead what ought to be most compelling to sociology, *the interdependence of the actors*. The game paradigm obtains its theoretical leverage by modeling the social fabric as a matrix of interconnected contestants guided by outcomes of their interaction with others, where the actions of each depend on, as well as shape, the behavior of those with whom they are linked.

Strategic calculation is but one of the ways payoffs might shape behavior. Survival is another, with payoffs representing "fitness points" in natural selection (Axelrod 1984, pp. 88–107). Rapoport and Chammah (1965) have also proposed a behavioral model of Prisoner's Dilemma, which is based on social learning theory (see also Flood, Lendenmann, and Rapoport 1983; Gardner, Corbin, and Beltramo 1984). This study builds on their pioneering work. In a stochastic learning model of iterated Prisoner's Dilemma, the game payoffs operate as positive and negative sanctions or social cues generated by the interaction that guides the players toward anomie or solidarity through reinforcement and attenuation of cooperative propensities. The players are adaptive rather than purposive, "backward looking" rather than "forward looking," reactive rather than preemptive.

Although a stochastic learning model relaxes the strong rationality assumptions of conventional game theory, this need not imply that (1) human behavior is determined by stimuli, (2) that all behavior is adaptive, or (3) that all adaptive responses are unthinking. First, the model is not deterministic. Stochastic search introduces an element of uncertainty or "noise" that captures the idiosyncrasies of human behavior. This allowance for whim helps forgive the excessive frugality of the behavioral axioms. The model assumes only that the actors have a tendency to cooperate that is reinforced by the payoffs. They remain free to do the unexpected so long as their whims are randomly distributed. Random does not mean trivial; the central finding is that these idiosyncrasies are pivotal for escaping social traps.

Second, no claim is made that cooperation is never rational or that actors never exercise foresight. The point is not that actors always neglect the strategic implications of future interaction but only to ask what happens when they do.<sup>2</sup>

Third, social learning theory does not conflict with (nor does it share)

<sup>2</sup> Among economists, there is a growing "willingness to concede that the rationality assumptions of economic theory are not descriptive of the process by which decisions are reached and, further, that most decisions actually emerge from response repertoires developed over a period of time by what may broadly be termed 'adaptive' or learning processes" (Winter 1986, p. 244; see also Cross 1983). In the exchange of private goods, these processes tend to lead the actors, willy-nilly, into the equilibrium predicted for rational actors. Hence, market models need only assume that the actors behave *as if* they were rational. Elsewhere (Macy 1990b), I have questioned whether this "as if" principle is also available to rational choice models of the social dilemmas created by public goods, where opportunities to free ride, the lower impact of individual efforts, and the absence of competitive pressures on individual survival may trap adaptive actors in local maxima. The irony is that sociologists working with rational choice models may have no choice but to assume that actors in the social and political sphere *really are* forward-looking utility maximizers, which economists focusing on market behavior may not need to do.

the instrumentalist and egoistic assumptions of rational choice. Game-theoretic models of reinforcement and rationality share a common paradigm of payoff-conditioned behavior, and attention should be narrowly focused on the alternative specifications of this feedback, that is, on the relative weight of immediate and future outcomes on current choices. The instrumental basis of cooperative behavior is not the key point of contention.

To elaborate, adaptive actors chart their course on the fly, in response to changing signals, but this need not imply that cooperation emerges unintentionally, behind the backs of agents who remain unaware of what they are doing or why. Adaptive behavior can be manifested as consciously instrumental responses to the signals generated by choices, as in the children's guessing game of "getting hotter/getting colder." While the children's responses are deliberate and locally maximizing, their search strategy is unable to predict when they should take "one step backwards in order to take two steps forwards" (Elster 1979, p. 10). Myopic maximizers simply learn from their mistakes, repeating choices that seem to pay and avoiding those that prove costly. In cybernetic terms, they pursue their target relentlessly but cannot know its trajectory and therefore cannot intercept it by plotting a shortcut, a higher-order process that requires the capacity to anticipate its future moves. In short, "rationality is characterized by the capacity to relate to the future," which Elster (1979, p. viii) contrasts with "the myopic gradient-climbing" in adaptive or evolutionary processes.

Iterative Prisoner's Dilemma provides a convenient illustration of the distinction between backward-looking and forward-looking behavior. Fully rational action entails the singular capacity to recognize the logical implications of ongoing play. This capacity can be measured experimentally by observing mutually cooperative subjects when unexpectedly warned that the game is about to terminate. Rational actors, recognizing the implications of the endgame, should immediately stop cooperating despite having enjoyed considerable success up to that point (Luce and Raiffa 1957; for a more cautious assessment, see Hardin [1982]; for experimental evidence of "endgame" effects, see Tognoli [1975] and Murnighan and Roth [1983]). Backward-looking pragmatists will instead be eager to reap as much as possible from a demonstrably successful routine before the clock expires. They alter their behavior only as an aversive reaction to unwanted payoffs.

#### A. Instrumental and Normative Learning

Although learning theory can be used to model consciously instrumental (but myopic) behavior, it is typically applied to behavior that is unthinking or habitual. Adaptive responses in Prisoner's Dilemma need not be

pragmatic but may instead be rule governed, with the payoffs sanctioning the legitimacy of the associated norms. The attachment to cooperative norms is thus strengthened when compliance entails the exchange of favors and when deviance is self-defeating. Conversely, the attachment declines when virtue is exploited with impunity.

Scott's (1971) theory of moral commitment shows how social learning theory can be applied to the "internalization of norms." Scott builds on Homans's behavioral model of social exchange in which "the behavior of one organism serves as a stimulus for the behavior of another . . . [which] in turn serves as a stimulus for the first" (Scott 1971, quote on p. 64; see also Homans 1961, p. 35). In complex social interactions, this mutual conditioning can generate patterns with varying degrees of regularity. Inconsistent sanctions lead to a cognitive response (based on expediency) that decays quickly. Instrumental compliance with social conventions depends on estimates of the magnitude and probability of sanctions, with no intrinsic attachment to the rule itself (Hechter 1987, pp. 3–5, 15–39). Hence, compliance ceases if the monitor leaves.

Over time, a consistent pattern of sanctioning may routinize habitual responses that then require only periodic maintenance. When norms are internalized, the action is no longer guided by the payoffs but instead becomes "an end in itself, regardless of its status as a means to any other end" (Parsons 1968, p. 75). While pragmatists may change tack after every wind shift, habits are slow to change. "When learning is established, extinction of the response by stopping the reinforcement is slow" (Boring 1950, p. 651), leading to compliance with a norm "at a spatial or temporal remove from its sanctions" (Scott 1971, pp. 88, 107).

To sum up, a stochastic learning model of Prisoner's Dilemma relaxes only the assumption that actors appreciate the strategic implications of future interaction. Like rational action, adaptive behavior can be fully conscious, deliberate, and expedient. However, while rational action is inherently instrumental, adaptive behavior can also derive from rote decision rules, unthinking habits and routines, and internalized norms.

The following example illustrates the difference between forward-looking and backward-looking behavior (whether instrumental or normative) in an everyday social interaction. Suppose two neighbors, Ego and Alter, stand to benefit by exchanging favors such as baby-sitting in a pinch, borrowing tools, getting a ride to work when the car is in the shop, watering the plants when the neighbors are on vacation, and avoiding aggravations such as playing loud music outdoors, stealing, or failing to mow the lawn regularly. These social exchanges provide each neighbor with greater security and convenience, yet each may at times feel annoyed by persistent requests, as well as tempted to take advantage of the other's goodwill. How might cooperation get started, and will it survive?

Let us begin by assuming Ego and Alter are fully rational and appreciate the opportunity for collusion. Although tempted to free ride, prudent foresight may lead them to restrain their selfish impulses and resentments and assist their neighbor, with each receiving  $R$  (see fig. 1). Each fears being made a sucker ( $S$ ), and each is tempted to test the other's resolve and see how much they can get away with ( $T$ ). However, they are chastened by their appreciation of what is at stake and their awareness that any such opportunism may invite retaliation ( $P$ ) and undermine the confidence required for tacit collusion.

Now consider what happens if instead Ego and Alter remain instrumentally motivated and are invariably practical but neglect their stake in the future. Initially, our shortsighted neighbors may aggravate rather than aid one another ( $P$ ), particularly if each thinks a neighborhood is nothing more than what one drives through to get home. However, Ego soon finds her behavior rather costly when emergencies arise and she needs a favor. Eventually, she may come to question the wisdom, if not also the propriety, of her self-serving conduct. If she gets suckered ( $S$ ), she may conclude that neighborliness does not pay and revert to noncooperation, while the opportunity to take advantage of Ego with impunity encourages Alter to try again ( $T$ ). However, should Alter happen to reciprocate Ego's gesture of goodwill ( $R$ ), Ego senses that the new policy is working and continues. Over time, repeated reinforcement may lead to habitual compliance with the norm of "being a good neighbor" with little or no instrumental reflection. These civic obligations then motivate actions whose consequences strengthen attachment to the norm. With each exchange, the social ties across the back fence are strengthened.

These illustrations are not meant to suggest that adaptive behavior (whether instrumental or normative) will lead to more cooperation than that predicted for savvy strategists; indeed, there may well be less. The point is that the actors may not always have the temperament, cognitive skills, and information required to engineer a tacit collusion. Suppose instead they must grope their way toward a seemingly uncertain future, guided by the cues their actions generate. Learning theory does not resolve the social dilemma, it only reframes it: Where the penalty for cooperation is larger than the reward, and the reward for defection is larger than the penalty, how can penalty-averse, reward-seeking actors elude the trap of mutual punishment?

## B. Summary of the Findings

If players in iterative Prisoner's Dilemma fail to appreciate the strategic implications of future interaction, rational choice theory gives them little

chance for escaping the trap. Computer simulations of a stochastic learning model confirm this. In Section II below, I elaborate my (Macy 1989) two-player model of social exchange by using simulations to draw out the implications of learning theory that are not apparent in the initial assumptions and to illustrate implications derived analytically.<sup>3</sup> The findings reveal a stable, noncooperative equilibrium into which even highly cooperative contestants are likely to gravitate. Where mutually contingent choices are conditioned by the sanctions they generate, the logic of interdependence tends to lead the players into this social trap.

The noteworthy finding, however, is that these adaptive actors can nevertheless escape, even though they fail to appreciate the possibility for collusion created by repeated play. Indeed, the model provides a convenient way to measure how much better they might do with a bit more foresight, and shows that it is a good deal less than what rational choice theory might lead us to expect. For nonstrategic players, cooperation depends not on the "shadow of the future," but on the salience of *immediate* outcomes. Those who respond quickly, without having to wait for long-term cumulative effects, can escape a suboptimal equilibrium through a fortuitous sequence of consecutive bilateral moves. Finally, the simulations suggest that attachment to cooperative norms is more likely to be a consequence than cause of successful collusion and that normative solidarity is useful primarily in promoting recovery from occasional deviance.

Section III extends the argument to a network of multiplex pairwise exchanges modeled as an  $N$ -way Prisoner's Dilemma. Computer simulations of adaptive behavior corroborate the main conclusions of rational choice theory on the difficulties of collective action in large, anonymous groups, but the model points to a very different diagnosis. The effects of network size, density, mobility, and anonymity are shown to derive from a fundamental principle of collective action: the need to reduce the number of choices that must be stochastically synchronized to escape anomic equilibrium. The results also suggest how network structure might evolve in tandem with the cooperation it facilitates.

<sup>3</sup> Simulated data can invite skepticism since they are not generated by experimental subjects. However, Turner (1987, p. 233) counters that simulation is "an important research activity, as it allows for the controlled analysis of more complex situations than is the case with laboratory experiments." Coleman (1956, p. 3) also argues that simulated games between "idealized persons" may be preferable to laboratory experiments where idiosyncratic factors introduced by "real persons" may obscure the theoretical implications, and Marwell, Oliver, and Pahl (1988, p. 503) show how simulations can be used to generate unexpected results.



## II. A STOCHASTIC LEARNING MODEL OF SOCIAL EXCHANGE

The formal model assumes two contestants, each with some propensity to cooperate,  $p_{ij}$ , representing the probability that player  $j$  chooses cooperation at iteration  $i$ . Choices at each move are determined by the magnitude of  $p_{ij}$  relative to a random number  $n_{ij}$  from a uniform distribution, such that  $C_{ij} = 1$  (player  $j$  cooperates at iteration  $i$ ) if  $p_{ij} \geq n_{ij}$ , and  $C_{ij} = 0$  if  $p_{ij} < n_{ij}$ . The choices of the two players then generate outcomes  $O_{ij}$ , as given by the payoff matrix for a Prisoner's Dilemma ( $R$ ,  $S$ ,  $P$ , or  $T$  in fig. 1), and the payoffs in turn modify their propensities to cooperate and defect.

The learning algorithm is an elaboration of a conventional Bush-Mosteller (1955) stochastic learning model for binary choice:

$$p_{i+1} = p_i + O(1 - p_i), \quad (1)$$

where  $p_i$  is the propensity to choose reinforced behavior at iteration  $i$  and  $O$  is a positive constant less than one. This model can be adapted to the Prisoner's Dilemma by allowing  $O$  to vary according to the relative magnitude of the payoffs. The propensity to cooperate is reinforced when cooperation is rewarded ( $C_{ij} = 1$  and  $O_{ij} > 0$ ) or defection is punished ( $C_{ij} = 0$  and  $O_{ij} < 0$ ):

$$p_{i+1,j} = p_{ij} + [O_{ij}(1 - p_{ij}^{(1/O_{ij})})C_{ij}] - [O_{ij}(1 - p_{ij}^{(1/O_{ij})})(1 - C_{ij})] \quad (2)$$

Since  $O$  can take on negative values, equation (1) was elaborated to allow for the reward for cooperation ( $C$ ) as well as the punishment for defection ( $1 - C$ ), as indicated in equation (2) by the two adjustments to  $p_{ij}$ , one positive and the other negative. Hence, the reward for cooperation is added to the propensity when  $C_{ij} = 1$ , while the negative payoff for defection is subtracted when  $C_{ij} = 0$ , causing the propensity to cooperate to increase in either case. Conversely, if defection is rewarded or cooperation is punished, then the propensity to defect ( $1 - p$ ) is reinforced, that is,  $1 - p$  is substituted for  $p$  on both sides of equation (2) and  $1 - C$  is substituted for  $C$ .

Equation (2) also assumes that reinforcement decays with the propensity, and that the larger the stimulus, the more rapid this decay, as given by the exponential expression  $1/|O_{ij}|$ . Hence, large rewards change behavior more than small ones, but 10 applications of a small reward have greater cumulative efficiency than five applications of a reward of twofold magnitude.<sup>4</sup>

<sup>4</sup> The Bush-Mosteller (1955) algorithm assumes that the exponent is fixed at unity and that  $O$  does not vary either. Here the model is applied to the Prisoner's Dilemma, and both the reinforcement and its rate of decay are allowed to vary with the payoffs. Freeing  $O$  while fixing the exponent alters equilibria but not the dynamics or the substantive conclusions; see Swistak (1990) and Macy (1990a).

It is useful to begin with the assumption that  $R$  and  $P$  reinforce the propensity to cooperate ( $R$  rewards cooperation and  $P$  punishes defection), while  $T$  and  $S$  decrease the propensity ( $T$  rewards unilateral defection and  $S$  punishes unilateral cooperation). Clearly, this constraint is not always appropriate. For example, aggravated neighbors may want nothing more from each other than an end to the loud noise, littering, and delinquent behavior of the children next door. Exchanges where Ego is penalized no matter what Alter does (with only a change in degree) will be introduced as a complication of the initial model. However, the analysis is focused at the outset on social dilemmas in which Ego is rewarded when Alter cooperates and penalized when Alter defects ( $T > R > 0 > P > S$ ). For example, where the actors can choose between the exchange of gifts or blows, the breakdown of cooperation can lead to costly conflict, cease-fires can be a prelude to exchange for mutual gain, and benevolence may encourage aggression. Moreover, even a partial cease-fire may nevertheless be encouraging after a period of intense mutual conflict ( $R > 0$ ). Similarly, the willingness to tolerate a neighbor's self-indulgent annoyance (with only token retaliation) may encourage its continuation ( $T > 0$ ). Conversely, the failure to adequately share needed resources may prove costly ( $P < 0$ ), while the failure to properly reciprocate a benevolent gesture may discourage its continuation ( $S < 0$ ).

The payoff matrix can be reduced to two parameters, magnitude ( $\sigma$ ) and severity ( $\gamma$ ), where  $\sigma = (R - P)/2$  and  $\gamma = (T - S)/(R - P)$ . It is also useful to impose the simplifying assumptions  $R = -P$  and  $T = -S$ , giving  $\sigma = R$  and  $\gamma = T/R$ . For example, a game with  $\gamma = 2$  means that exploitation ( $CD$  or  $DC$ ) is twice as rewarding as  $CC$  and twice as painful as  $DD$ . A magnitude of  $\sigma = .01$  means that the actors learn very slowly, while  $\sigma = 1$  means that the reinforcements are 100 times as large, such that the actors are likely to alter their course following each aversive outcome. Relatively low magnitude might correspond to a low interest in the outcomes, a noisy environment, or time lags that weaken the association between sanction and behavior. It can also model internalized normative responses that are extinguished more slowly than expedient responses based on conscious assessments of goal-attainment, as previously noted.

Since the four outcomes given by the payoff matrix follow automatically once we know the magnitude and severity of the sanctions,  $\sigma$  and  $\gamma$  inherit the constraints that define an iterated Prisoner's Dilemma ( $T > R > P > S$  and  $2R > T + S$ , with the latter making the players better off cooperating than taking turns exploiting one another). Given the initial constraint  $0 < |O| < 1$ , and substituting  $\sigma = R = -P$ ,  $T = -S$ , and  $\gamma = T/R$ , we obtain the a priori inequality  $0 < \sigma \gamma < 1 < \gamma$ .

To illustrate the learning algorithm, consider a game with  $R = -P$

= .1 and  $T = -S = .2$ , or  $\sigma = .1$  and  $\gamma = 2$ . Suppose the game begins with two rugged individualists, Ego and Alter. Their cooperative propensities at  $i = 1$  are therefore  $p_{1j} = 0$ , leaving both certain to defect. This punishes both players ( $O_{1j} = P = -.1$ ), causing their propensities to increase to  $p_{2j} = .1$  (at  $p_{1j} = 0$  there is no resistance to positive reinforcement). This process will reiterate until the pain is sufficiently unbearable (i.e., the repeated punishments cause  $p_{ij}$  to become sufficiently large) that Ego offers to cooperate. If Alter has yet to see the light, Alter is finally rewarded for defection ( $O_{i2} = T = .2$ ) and becomes even less cooperative, while Ego is made a sucker with the same result ( $O_{i1} = S = -.2$ ). Both propensities then drop up to 20 percentage points, with the downward reinforcements rapidly decaying as propensities approach their lower limit. If, on the other hand, Alter instead happens to also cooperate, both players find that they are rewarded for their benevolent gesture ( $O_{ij} = R = .1$ ) and become even more likely to cooperate again. Should this occur, their cooperative propensities will increase by about .1 with each reinforcement until they become nearly 90% certain to cooperate, after which the rate of learning will drop off very rapidly as the players lock in mutually reinforcing cooperation.

#### A. Trapped in a Punitive Equilibrium

Computer simulations show how the learning process generates multiple equilibria in a Prisoner's Dilemma, one of which is both stable and punitive—a social trap from which the contestants may find it difficult to escape. The latent structural properties of the model are most clearly manifested by making the number of iterations required to alter behavior unrealistically large so as to minimize random disturbance of the equilibria. Let  $\sigma = .01$  and  $\gamma = 2$ , giving a payoff matrix  $R = -P = .01$  and  $T = -S = .02$  for both players. In order to reduce unnecessary complexity, the paired players may be assumed to have identical initial propensities and to be subject to the same reinforcement schedule, which means their propensities can never diverge.<sup>5</sup>

Figure 2 reports the behavioral changes ensuing from three separate start values, chosen to illustrate equilibria. The three simulations reveal a punitive but stable equilibrium at .21, a threshold (or unstable equilibrium) at .79, and an absorbing state characterized by nearly 100% mutual cooperation.

<sup>5</sup> Macy (1989, p. 209) and Rapoport and Chammah (1965, p. 102) have shown that players with dissimilar initial propensities will promptly converge, with predominantly unilateral moves absorbed by *DD*. In the multilateral game, to be elaborated shortly, the players' propensities typically diverge.

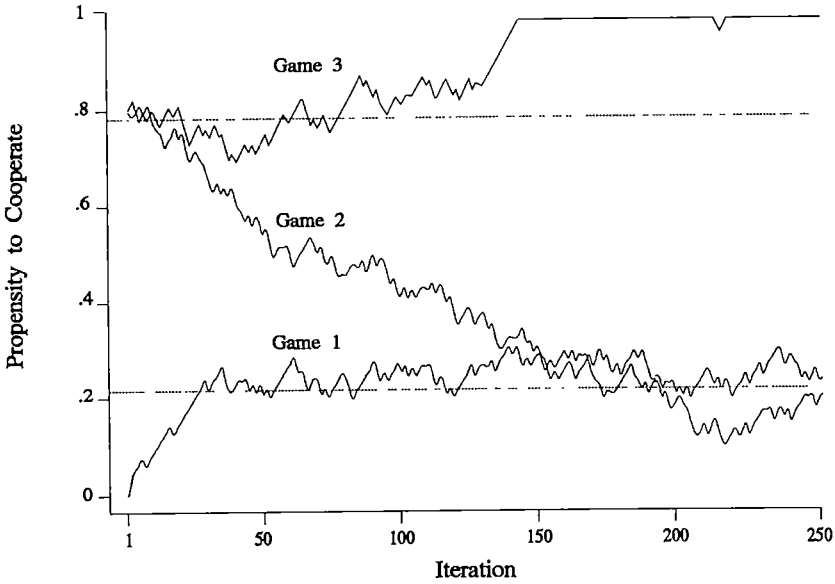


FIG. 2.—Equilibria for stochastic learning model of Prisoner's Dilemma ( $\sigma = .01$ ,  $\gamma = 2$ ; start values = 0, .8, .8).

At equilibrium, symmetric and asymmetric choices are distributed inversely to the ratio of their associated reinforcements. The symmetric moves *CC* and *DD* increase the propensity to cooperate, while asymmetric choices decrease it. Hence, equilibria occur where the probability of receiving an "upward" reinforcement times its magnitude ( $\sigma$ ) equals the probability of receiving a "downward" reinforcement times its magnitude ( $\sigma\gamma$ ).<sup>6</sup>

Since the magnitude of "upward" reinforcements is by definition less than that of the "downward," the stable equilibrium ( $p_e$ ) must always be noncooperative ( $p_e < .5$ ). A relationship at equilibrium will therefore always be predominantly punitive, entailing more incidents of mutual defection than cooperation (14 times as many in game 1 of fig. 2). This

<sup>6</sup> More precisely, the equilibrium propensity  $p_e$  may be obtained by

$$0 = 2p_e q_e \sigma \gamma (1 - q_e^{(1/\sigma\gamma)}) - (p_e^2 + q_e^2) \sigma (1 - p_e^{(1/\sigma)}), \quad (3)$$

where  $q_e = 1 - p_e$ , and  $\sigma$  and  $\gamma$  are the magnitude and severity of the payoffs as previously defined. Note that the probability of choosing *C* is  $p$  and the probability of choosing *D* is  $q$ . Hence the probability of either *CC* or *DD* is  $p^2 + q^2$ , and the associated payoff is  $\sigma$ . The reasoning for the asymmetric outcomes *CD* and *DC* is similar. What remains is the adjustment in the decay rate as propensities consolidate.

poses the central paradox of learning to cooperate in an iterated Prisoner's Dilemma. Although the players are attracted to  $R$  and recoil from  $P$ , even highly cooperative players respond to the reinforcements by gravitating toward a punitive equilibrium.

The noncooperative contestants in game 1 are caught in a self-defeating rut ( $p_e = .21$ ). If both defect (or both cooperate), it makes the players less nasty, bringing them closer to the midpoint where the chances of unilateral defection are highest (unilateral moves are impossible when the mean propensity is 0 or 1 and most likely at .5). Unilateral moves then push both players back toward the noncooperative equilibrium. On the other hand, among cooperative players (those above the midpoint), the learning process is self-reinforcing. Above .5, mutual cooperation takes the players farther still from the treacherous midpoint. The Prisoner's Dilemma thus becomes a game of catch-22. Symbiotic behavior is self-reinforcing among players who are already cooperative and self-limiting among those who need to learn how.

Why then do the highly cooperative players at the start of game 2 not lock in mutual cooperation like those in game 3? While exploitation is self-limiting below .5, it too is self-reinforcing for cooperative players, setting into motion a series of recriminations. The contestants in game 3 are spared this fate only because their initial cooperative propensities are above the threshold value. For those above the threshold (or unstable equilibrium), cooperation is reciprocated sufficiently to offset the effects of expected betrayal, permitting a recovery of the lost ground through mutual cooperation before the disturbance can be repeated, as illustrated in game 3 at iteration 220. However, if either player is below the threshold propensity, cooperation invites sufficient incidents of exploitation that propensities will be ratcheted inexorably into anomic equilibrium, as happens in game 2.

Suppose exogenous sanctions are somehow imposed that make exploitation less rewarding but not altogether unattractive, that is, the game remains a Prisoner's Dilemma but one that is less severe. The model reveals a paradoxical effect. One might think that reducing the temptation to free ride would reduce the rate of exploitation at equilibrium. The unexpected result is that the incidence instead *increases*. Holding the other three payoffs constant, reducing  $T$  does indeed make the players less prone to defect and more cooperative than they would be otherwise. Lowering  $T$  thus raises the noncooperative equilibrium; at  $T = R$ , the game is no longer a Prisoner's Dilemma, and the equilibrium occurs at  $p_e = .5$ . But the closer the equilibrium comes to .5, the higher the equilibrium rate of exploitation, as previously noted. Hence, the less rewarding it is to exploit in a Prisoner's Dilemma, the more the players may be expected to do it.

## B. Escaping the Social Trap: Those Who Hesitate Are Lost

By showing that the social trap is a stable, anomic equilibrium, the simulations also reveal a way out: *stochastic collusion*. Those unable or unwilling to engineer a tacit collusion may nevertheless enjoy an unintended facsimile if the reinforcements are sufficiently large. The problem in figure 2 is that the players alter their behavior too slowly, indeed, unrealistically so. More decisive actors can spring the trap with a short sequence of consecutive symmetric moves that gets them across the threshold and into "lock-in" before the law of averages catches up with them, as illustrated in figure 3. The parameters in this simulation are identical to those in figure 2 except that  $\sigma = .1$ . The larger payoffs mean that the players change their colors relatively quickly, without the need for long-term cumulative changes. (This also means that the reinforcements begin to decay earlier, raising the equilibria in fig. 3 to .26 and .81). It took about 20 iterations for the players to stumble into the coordinated sequence needed to cross the threshold and another 110 to attain lock-in after failing on the first attempt. This remains rather unrealistic for many if not most everyday relationships. However, as the magnitude increases further, the number of iterations needed to achieve lock-in declines exponentially, with lock-in requiring no more than two or three iterations if  $\sigma \approx 1$ , that is, if players always switch behaviors following aversive outcomes ( $CC \rightarrow CC$ ,  $DD \rightarrow CC$ , and  $CD \rightarrow DD \rightarrow CC$ ).

This solution to social dilemmas offers a clear alternative to rational choice explanations of the temporal logic of collective action. Among rational actors, the key to cooperation is the weight of the future relative to immediate outcomes. However, where contestants fail to enjoy the advantage of strategic foresight, simulations based on learning theory indicate that it is then the *weight of immediate outcomes that becomes critical*. Cooperation is thus unlikely where history casts a long shadow, that is, where routines can change only through long-term cumulative reinforcement. However, if both sides are prepared to shift course decisively, they can escape anomic equilibrium with stochastically synchronized moves. (In other words, the learning rates must be similar; if either side hesitates, both are lost.) Their behavior will look to all the world like that of clever strategists who have finally engineered a tacit collusion, but their collaboration is entirely fortuitous and unintended.

The need to reduce the number of choices that must be stochastically synchronized means that expediency may be more conducive to cooperation than is normative solidarity. Recall that the internalization of norms requires a consistent pattern of sanctions, after which the response will persist "at a spatial or temporal remove from its sanctions" (Scott 1971, p. 88). A series of successful exchanges will be needed to build attach-

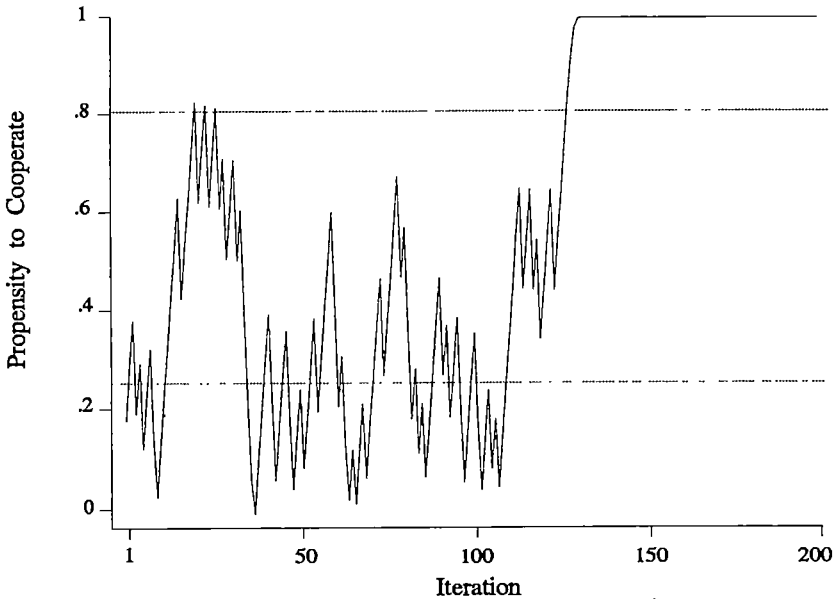


FIG. 3.—Locking in cooperation by stochastic collusion ( $\sigma = .1$ ,  $\gamma = 2$ )

ments to cooperative decision rules among ambivalent actors. Noncooperative equilibrium thus tends to be anomic due to inconsistency in the application of sanctions: sometimes cooperation pays off and at other times it does not, depending on the choices of the interactor. Responses at equilibrium are therefore more likely to be pragmatic than normative. Since pragmatic responses are more decisive, they are more likely to facilitate stochastic collusion.

At the same time, expediency has a downside: the lack of forgiveness. Pragmatists may simply repeat responses that pay and may switch when they do not, thus promoting collusion but not forgiveness once lock-in is attained. While forgiveness is not needed to establish cooperation, it is necessary to prevent its collapse should one of the contestants deviate. Of course, cheating is highly unlikely at lock-in. Nevertheless, the game retains residual uncertainty—Selten's (1975) "trembling hand" that pushes the wrong button. "Overreaction" to random disturbance thus poses the danger that propensities may drop below the threshold for recovery. Hence, the model predicts that cooperation built on expediency will be less forgiving of occasional betrayal.

The need for forgiveness identifies the moment of internalized norms. Cooperation may be more easily established by pragmatists, but it is more easily preserved by those whose cooperative propensities are largely

normative. Normative constraints may be expected to evolve only after the players lock in a consistent pattern of reinforcement. However, once normative solidarity is established, it is unlikely to collapse following a single betrayal since rule attachments change more slowly than do instrumental assessments of goal attainment. This suggests that normative solidarity develops only after cooperation has already been locked in, and that its province is not getting cooperation established so much as promoting recovery from occasional backsliding.

### C. The Improvidence of Foresight

It remains to be shown how myopic pragmatists may sometimes learn to cooperate more readily than do rational strategists who exercise foresight. The behavior of the latter can be modeled as a stochastic process involving "response-conditioned" instead of "state-conditioned" propensities (Rapoport and Chammah 1965). Forward-looking players are influenced less by immediate payoffs (or states) and more by the responses of the interactant as these communicate the prospects for collusion or conflict.<sup>7</sup> So long as Ego cooperates, both models predict identical changes in Ego's behavior. If both Ego and Alter cooperate and Ego is backward looking, Ego is encouraged to continue because cooperation seems to pay (*R*). If Ego is forward looking, Ego is also encouraged to continue or risk the collapse of tacit collusion. By similar reasoning, both adaptive and fully rational actors will tend to retaliate when exploited (*S*). In short, mutual cooperation is self-sustaining whether the actors look backward or forward, and victims of exploitation may in both cases be expected to retaliate.

However, the models predict opposite reactions by Ego after Ego defects. Suppose a series of *DD* is interrupted by Alter's unilateral cooperation. Alter receives *S* and Ego gets *T*. Adaptive actors are encouraged by *T* to continue to defect. The victim, not the exploiter, is more likely to convert, making *CD* an unlikely transitional state between *DD* and *CC*. Rational strategists, on the other hand, resist the myopic temptation to free ride. Foresight cautions them to reciprocate rather than exploit

<sup>7</sup> Although strategic foresight has been emphasized here because of its prominence in game theory, response-conditioned strategies also apply to several other and quite different models that are behaviorally equivalent. The actors may learn to cooperate by imitating the behavior of interactants, as in role theory (Hechter 1987, pp. 67–68). Or propensities to cooperate may depend on feelings of warmth and hostility that reflect how one has been treated by the interactant. These diverse processes—strategic foresight, role modeling, and affective reciprocity—all motivate the actor to respond in kind to its interactants, converging in what is clearly a robust pattern of behavior, "tit for tat" (Axelrod 1984).



cooperative overtures by an equally sober interactant. Hence, to the extent that the players are forward looking, the impact of  $T$  will be attenuated or even reversed. Rational choice theory is thus much more optimistic that the free rider will convert, making  $CD$  a plausible transition to lock-in.

Rapoport and Chammah's classic experiments, based on iterated Prisoner's Dilemma, support this interpretation. Following a unilateral response, the defector appears to be much less likely to switch than does the sucker (1965, pp. 198–99). However, they found that "if the payoff matrix is displayed, the unilateral responses tend increasingly to become  $CC$ . . . . If the matrix is not displayed, on the other hand, this does not occur; the unilateral responses continue to be absorbed into  $DD$  responses. It appears that we have pinned down the role of the displayed matrix as a reminder to the subjects that a tacit collusion is possible" (1965, p. 95). Strategic foresight clearly seems to be helpful.

On the other hand, by reacting immediately to the sting of mutual loss, adaptive actors may have an advantage breaking out of a cycle of mutually self-defeating competition. Rational strategists know better than to indulge an opponent who continually defects. Prudence cautions each side to estimate the probability that a cooperative overture will be reciprocated before being the first to blink. Where each side expects the other to defect, each acts so as to reinforce the other's expectations. In classical game theory,  $DD$  is therefore a Nash equilibrium—a state in which strategic actors have no incentive to unilaterally alter their choices at the next move. Each side feigns disinterest in cooperation, in the hope that the opponent will make the first overture, but when both play this game, the result can be a prolonged conflict. In stochastic representation, the downside of savvy behavior is that the impact of  $P$  is also attenuated or reversed. Reducing  $P$  lowers the noncooperative equilibrium; eliminating or reversing its impact creates a self-reinforcing absorbing state at  $p_e = 0$ , trapping the players in an endless series of mutual recriminations.

Figure 4 shows what happens in a game where the responses to both  $T$  and  $P$  are reversed. Cooperative propensities now increase with  $R$  and  $T$  but decrease with  $S$  and  $P$ , modeling a tendency to "tit for tat." Otherwise, the fixed parameters are identical to those for figure 3. The simulations show that the threshold of cooperation drops from .81 to .5, while the noncooperative equilibrium also drops from .26 to 0. The lowered threshold makes it more likely that initially cooperative players will lock in mutual cooperation. But, failing that, rational actors have much less chance of escape than do adaptive contestants more willing to alter their behavior in reaction to aversive cues. The shadow of the future clearly helps players consolidate a tacit collusion once cooperation has gained a foothold. However, in an anomic world, it is more liability than

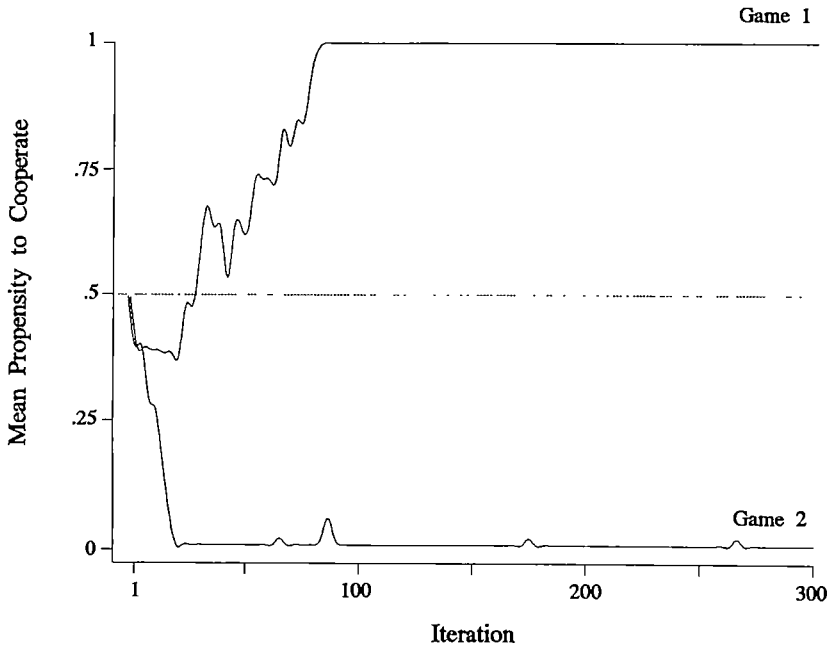


FIG. 4.—Equilibria with response-conditioned propensities ( $\sigma = .1$ ,  $\gamma = 2$ ; start values .5, .5).

asset. Adaptive players eventually escape equilibrium and lock in mutual cooperation, as illustrated in figure 3. Meanwhile, with identical payoffs, more sophisticated players remain trapped at  $p_e = 0$ , with no hope of escape.

Several experimental studies of iterated Prisoner's Dilemma show that mutual recrimination eventually wears down both sides. Rapoport and Chammah report a much higher initial incidence of *DD* than *CC* as "the 'hard realities' of the Prisoner's Dilemma game become impressed on the players. However, there is no percentage in *DD*, and sooner or later the players recognize this" (1965, p. 201). Other studies have also reported evidence of this pattern.<sup>8</sup> Simply put, anomic equilibrium does not appear to be the black hole depicted at the bottom of figure 4. Cooperation seems to gain a foothold in an asocial world through an aversive

<sup>8</sup> For studies of the effect of cognitive factors on successful collusion, see Lindsfold and Finch (1981), Basu (1977), Pincus and Bixenstine (1977, 1979), Tognoli (1975), Murnighan and Roth (1983), and Steinfatt (1973). For the impact of noncognitive factors, see Carnevale, Pruitt, and Carrington (1982), Fox and Guyer (1978), Lacy (1978), and Clark (1983). For a brief discussion of differences between simulated and experimental results, see Macy (1990a).

reaction to punitive conflict, a response that neither requires nor benefits from "the capacity to relate to the future," Elster's benchmark for rational action. On that basis, let us proceed to games with more than two contestants.

### III. COLLECTIVE ACTION AS AN *N*-WAY PRISONER'S DILEMMA

Collective action differs from cooperation in that it requires more than two actors. An *N*-way Prisoner's Dilemma models a specific type of collective action problem involving dyadic exchanges within social networks (Coleman 1987; Axelrod 1984). Most rational choice studies of collective action focus on the production of public goods in which outcomes are aggregated over the choices of the group as a whole (e.g., preserving the ozone layer, tithing to public television, or participating in social protest). The dilemma is that noncontributors receive the same benefit as volunteers, but if everyone free rides, no one benefits (Olson 1965; Hechter 1987; Oliver and Marwell 1988). The *N*-way Prisoner's Dilemma differs from the public goods problem in the following three ways:

1. Each player interacts with the group at large only by pairing directly with all members or indirectly with those who in turn pair with the others.
2. Each player's payoff depends only on the choices of a given partner, regardless of what others do. This contrasts with contributions to public goods where often "only a fraction of the benefits of one person's action accrues to that person" (Coleman 1987, p. 59).
3. Each player may choose to cooperate with some interactants and not with others. This differentiation of interactants is essential for the exercise of reciprocity necessary to secure a tacit collusion, a rational choice solution that is generally not available in the production of public goods.<sup>9</sup>

The earlier example of neighborly cooperation can be elaborated as an *N*-way Prisoner's Dilemma in which exchanges link each neighbor to others through a network of dyadic ties. Moreover, we need not assume that everyone relates equally to everyone else, and, as the size of the neighborhood increases, very different structures of interaction become

<sup>9</sup> Other rational choice solutions have been developed for the public goods problem, notably Olson's (1965) "selective incentives" and Hechter's (1987) systems for monitoring and sanctioning compliance with corporate obligations. Heckathorn (1989) shows how such a sanctioning system might be agreed upon by rational actors unwilling to cooperate in its absence, but not in games with only two players. Oliver and Marwell (1988) propose a "critical mass" solution based on the jointness of supply of most public goods. Elsewhere (Macy 1990b), I apply a stochastic learning model to the production of public goods, showing that the theory of critical mass does not require assumptions of rationality.

possible with different consequences for the emergence and flow of solidarity throughout the network. These patterns might be shaped by the physical location of houses, shared interests, social and cultural attributes, or other factors exogenous to the payoff matrix. They might also be altered by the tendency of the actors to be more attracted to cooperative neighbors, such that the structure of the network is both cause and consequence of successful cooperation. Multiple exchanges thus reframe the original two-player problem: Given what we have observed about the dynamics of cooperation in each dyad, how will group size and structure affect the emergence of collective action in  $N$ -player exchanges?

Rational choice theory predicts that collective action is less likely to succeed in large, anonymous groups where predators gamble that their victims will never see (or at least recognize) them in the future. Computer simulations based on a stochastic learning model corroborate the predicted effects of group size and structure but show that the results do not depend on the capacity of the actors to appreciate the strategic implications of social dilemmas. Hence failures may not be an incentive problem created by the discounting of future payoffs but rather a problem of timing and coordination. Finally, the model suggests how structures that are more conducive to stochastic collusion might evolve in response to the payoffs and how collective action, once established, might be sustained in the face of invasion by free riders.

#### A. The Problem of Group Size

Recall that rational actors will always cheat in single-play Prisoner's Dilemma since they do not expect to see their interactant again. The key to tacit collusion is the formation of stable, long-term relationships that carry the sobering expectation of future interaction. The fear of inciting retaliation gives rational actors an incentive to restrain their aggressive impulses.

Unfortunately, that restraint tends to dissipate in  $N$ -way exchanges. James Coleman uses a computer simulation of randomly paired interactions in iterative Prisoner's Dilemma to show how tacit collusion is compromised if free riders can become "lost in a sea of anonymous others" where they "anticipate getting away without retaliation" (Coleman 1986, pp. 66–67; see also Axelrod 1984, p. 49).<sup>10</sup> For example, despite the

<sup>10</sup> Note that in the production of public goods, group size may actually facilitate the formation of a critical mass needed for successful collective action, as argued by Hardin (1982) and more recently by Oliver and Marwell (1988). For a rational choice treatment of group-size effects, see also Olson (1965, p. 28), Raub and Voss (1986, p. 94), Opp (1986, p. 161), and Elster (1985, p. 354).

risk of collision, an impatient motorist may be unwilling to yield at an intersection to an anonymous driver with whom he is unlikely to interact in the future. Civility may thus be more common in insular, provincial settings not only because the actors identify with each other, share common values, or adhere to more altruistic norms but because fellow citizens cannot easily fade into the mass as they might in a highly rationalized metropolis. The greater the number of possible interactants, the lower the probability that any two players will interact again, and if they should, the lower the probability that the victim will recognize his or her predator. This leads each to discount the danger of retaliation and the promise of collusion. Hence the future casts a smaller shadow and collective action based on tacit collusion becomes less likely to succeed.

Computer simulations based on the stochastic learning model corroborate the pessimistic predictions of rational choice theory: cooperation is more likely to thrive where networks are composed of small, stable clusters among which there is little movement or interaction. However, the simulations show that the hypothesized effects of group size and structure do not depend on the assumption that the actors are able to appreciate the strategic implications of a social dilemma. As the number of interactants increases, each actor may find it difficult to prevent outcomes in one exchange from contaminating their propensities to cooperate with other contestants. If so, the players will alter their behavior toward one partner based in part on the outcomes of exchanges with another, making escape from noncooperative equilibrium especially difficult. The effect is equivalent to reducing the magnitude of the reinforcements in the earlier two-person game (changes in the decay rates notwithstanding). Any players who remain in noncooperative equilibrium will tend to drag their interactants back down; hence, the more contestants, the more moves that must be stochastically coordinated to escape the social trap. Either everyone escapes or no one does. Whereas the probability of lock-in is about .015 in the two-player game depicted in figure 3 (based on eight consecutive bilateral moves beginning at noncooperative equilibrium), the probability plummets to .000225 (or  $.015^2$ ) in an identical game but with twice as many players. Simply put, the players are doomed by the law of averages that is more strictly enforced as  $N$  increases, keeping the players trapped in a noncooperative equilibrium.

The analysis of the two-player game reveals a lower limit (at about  $\sigma = .1$ ) below which stochastic collusion becomes highly impractical. By the same reasoning, there is also an upper bound on the size of an undifferentiated group in which collective action may be reasonably expected to emerge. By way of illustration, it is instructive to relax the assumption that  $T > R$  and  $\gamma > 1$ , to consider a game at the margin of the Prisoner's Dilemma, with minimum severity and maximum reinforcement ( $\sigma$  and

$\gamma$  approaching unity.) In this game, the players are likely to alter their response following aversive cues ( $S$  and  $P$ ) and to repeat their response following gratifying outcomes ( $R$  and  $T$ ). Hence, players will either be near-certain cooperators ( $p_{ij} \approx 1$ ) or near-certain defectors ( $p_{ij} \approx 0$ ). For cooperation to emerge, all players must interact only with those who are like-minded (which then makes everyone certain to cooperate). Two contestants will thus lock in cooperation within at most three iterations ( $CD \rightarrow DD \rightarrow CC$ ). If  $N = 4$ , the players will attain lock-in within four iterations, assuming random pairings at each move, as demonstrated in figure 5.

As the size of the group increases, collective action by all members becomes more difficult. At  $N = 20$ , stochastic collusion is indeterminate but will usually occur within about 300 iterations. This is illustrated in figure 6, which reports the mean propensity of all 20 contestants in a game with  $\sigma = \gamma = 1$ . In undifferentiated groups larger than 20, collective action is unlikely to emerge, even with minimum severity and maximum reinforcement.

#### B. Jump-Starting Cooperation

Although theories of learning and rational choice converge in predicting the failure of collective action in large, anonymous groups, they point to very different remedies. There is a clear consensus in the literature on rational choice that collective action is likely to require the creation of a secondary sanctioning system if there are more than a handful of interactants (Olson 1965; Hechter 1987). Coleman's (1987) rational zealot is a case in point. Zealots allow themselves to be exploited by the cult leader

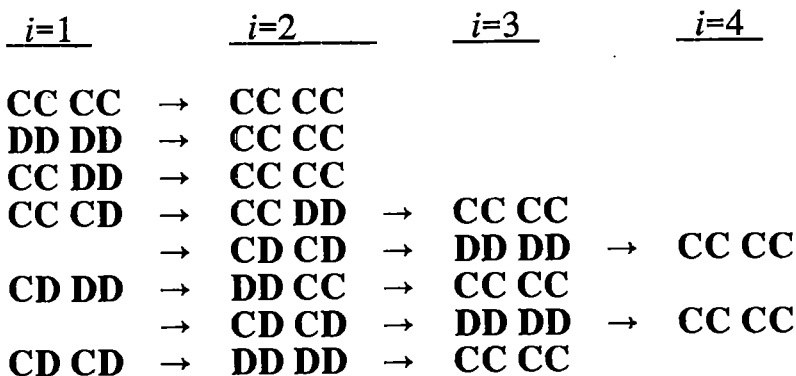


FIG. 5.—Lock-in attained within four iterations with  $N = 4$ ,  $\sigma = 1$ , and  $\gamma = 1$ .

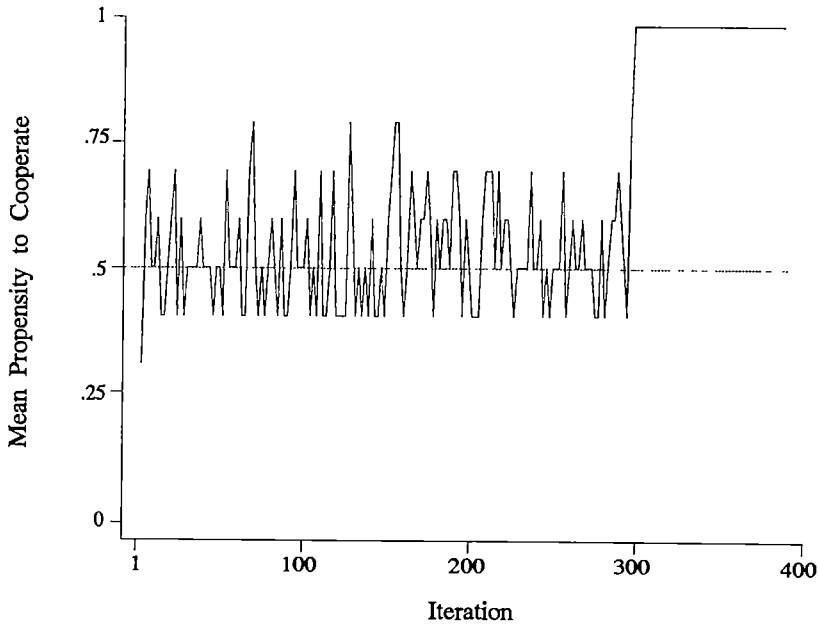


FIG. 6.—Stochastic collusion in 20-player game with maximum reinforcement and minimum severity ( $\sigma = 1$ ,  $\gamma = 1$ ).

in order to obtain the social approbation and status that is conferred only upon true believers. Since these psychic incentives are private (excludable) goods, they preclude free riding and thus transform the social dilemma into a conventional market transaction.

Learning theory suggests instead that the collective action problem may be mainly one of timing and coordination. Selective sanctions focused on exceptional participants may be doomed by the structural dynamics of the equilibria unless coupled with the pump-priming effects of public spectacle. Synchrony is the key to breaking out of social traps: short, intense mobilizations that command widespread attention so as to get everyone out of their noncooperative rut and over the threshold at the same time, at which point collective action becomes self-sustaining. Thus, periodic block parties and company picnics may jump start the exchange of resources and information (and a cease-fire of back stabbing and recrimination) among neighbors and colleagues. Similarly, annual religious gift-trading rituals are thought to facilitate more benevolent interpersonal relations (at least for a time).

Sanctions must not only be broadly applied but must also be appropriately timed, depending on the need for reward or punishment. In rational choice theory, "rewards and punishments do not differ and are inter-

changeable in their effect on individuals' rational decisions of whether to cooperate with collective action or not" (Oliver 1980, p. 1361, n. 7). In contrast, social learning theory shows that positive and negative sanctions perform entirely different catalytic functions. This can be illustrated by relaxing the assumption that  $R > 0 > P$ . Over time, ongoing conflict may acquire a sense of inevitability that numbs the players to the costs of mutual defection ( $P = 0$ ). Or noncooperation might even be rewarding but suboptimal ( $R > P > 0$ ). The stable equilibrium then approaches zero, precluding stochastic escape. In this anomic world, rewards to the occasional good citizen are counterproductive, indirectly encouraging those who prey upon benevolence. A shock to the system, deliberately induced by authorities or resulting from an unintended crisis, may be the only way to jolt the group out of its rut.

Once cooperation gains a foothold, the problem changes. Lock-in is induced by rewards for cooperation, not punishments for defection, and as the rate of cooperation increases, good citizens may be rewarded with less risk of feeding the sharks. This applies as well to games of conflict reduction, where  $0 \geq R > P$ . For example, punishing siblings for bothersome quarreling tends to be redundant.<sup>11</sup> Truces are not self-reinforcing without rewards for self-restraint and are therefore likely to collapse at the first unilateral defection. However, rewarding the contestants for a cease-fire may preserve it long enough for mutually beneficial, self-sustaining forms of interaction to emerge.

### C. Network Structure and Stochastic Collusion

So far we have assumed that group members are randomly linked, such that the number of possible interactants for each player is  $N - 1$ . However, most networks are structurally differentiated. For a given population size, a high-density network in which each position exchanges with every other will be less conducive to collective action than a chainlike structure in which each has only two interactors who are not linked with each other. This chainlike pattern may be found on a street where residents relate primarily to their next-door neighbors or in an organization with a vertical chain of command or division of labor that imposes hierarchical and functional restrictions on interaction and access. Low density may also occur in a highly centralized structure where peripheral positions interact only with the core and not with each other. These structures

<sup>11</sup> Numerous behavioral experiments have indicated that reward is generally more efficient than punishment (e.g., Skinner 1953), but that is unrelated to the point here, which is entirely a consequence of the logic of the Prisoner's Dilemma and has nothing to do with the psychology of the actors.



increase strategic players' expectations of future engagement with current partners. They likewise reduce the number of choices that must be stochastically coordinated for adaptive actors to escape anomic equilibrium.

The advantage of structural differentiation is lost, however, if incumbents move easily among clusters of linked positions. The number of partners of each player thus depends on three factors: the size of the group, network density, and the degree of mobility. Consider the familiar rational choice argument that upward mobility provides an "exit," an alluring alternative to individual efforts on behalf of a disadvantaged collectivity (Blau and Duncan 1967, p. 440). More generally, Hirschman (1970) shows how exits undercut "voice" by giving rational actors a private solution to collective problems, one that does not require them to depend on the cooperation of others. For example, the availability of private schools undercuts the willingness of concerned parents to fight for better public schools (Hirschman 1970, pp. 45–46). This logic applies to social exchange as well. Those who expect to move off the block have less incentive to act like good neighbors.

Social learning theory suggests a nonrational explanation for the logic of mobility: exits tend to disrupt social ties. Social and territorial mobility may undermine collective action not only because of the lure of "getting ahead" but also because of the disruption of the stable relationships required to escape noncooperative equilibrium by stochastic collusion. Hence, the effects of mobility on a given group are more likely to be associated with "inflow" (from other classes or neighborhoods) than "outflow," as observed by Goldthorpe (1980, pp. 62–63) in his study of "working-class maturation."

It is a truism among sociologists that collective action is more likely to succeed among actors who are concentrated in a bounded social space, with common economic interests and multiple and overlapping ties, like the public employees in the imaginary "Centauri" proposed by Marwell et al. (1988, p. 505). Their simulations of contributions to public goods show how high interdependence increases the benefits of collective action, while physical and social proximity reduces the costs of communication and organization. The analysis of multilateral pairwise exchange suggests a different advantage. Compared to more fully rationalized structures, networks with concurrent ties entail more frequent exchanges with fewer people. Centaurians are kin to their friends, friends with their neighbors, neighbors with their workmates, and they all belong to the same church, PTA, and bowling league. Centaurians may grow tired of one another, but they enjoy the benefits of low coordination complexity.

They may also benefit from their lack of anonymity. The ability to differentiate interactants is a precondition for tacit collusion among rational actors, and Centaurians cannot easily disappear into the crowd. Sim-

ulations of adaptive behavior show that this precondition for tacit collusion is sufficient; if the players are able to differentiate among partners, rationality becomes superfluous. Suppose the actors are backward-looking and reactive yet able to recognize former partners, remember the choices and outcomes of their exchange, and careful not to generalize the lessons of that experience to their relationship with others. In other words, each player differentiates and modifies their cooperative propensities according to the identity of their interactant. Lock-in will now be no more difficult in  $N$ -way interactions than in the isolated two-player relationship simulated in figure 3. The size of the group will compromise stochastic collusion only insofar as it exhausts the capacity of the contestants to recognize former partners. In very low density networks, this differentiation is relatively easy, and the collective action problem is equivalent to a series of simultaneous two-player games. With maximum reinforcements, stochastic collusion will then occur within three iterations, no matter how large the network.

#### D. Evolving Structure: Exit, Loyalty, and Inequality

This finding has important implications for rational choice solutions to social traps. Rational choice theorists may have mistaken the ability to anticipate long-term consequences for what really matters in collective action, *the ability to tell people apart*. The mistake is easy to make since the former is useless without the latter. Tacit collusion requires the capacity to differentiate interactants, but we now see that if the actors have this capacity, they do not need the shadow of the future. Even stolidly myopic pragmatists can then be expected to find their way over the threshold and into lock-in. Collusion that succeeds on the basis of enlightened self-interest is likely to have succeeded without it.

Unfortunately, as the number of interactants increases, the actors find it increasingly difficult to keep careful track of who can and cannot be trusted. Moreover, those who fail to exercise foresight may also fail to see the need to file this information for future reference. In large and highly mobile groups, successful collusion may therefore depend on loyalty, the willingness to forgo opportunities to exit.

In rational choice theory, loyalty creates a vested interest in cooperating with the interactant (Hirschman 1970). Social learning theory suggests a different advantage. Adaptive players can facilitate stochastic coordination if they stop playing the field. Suppose the actors choose not only whether to cooperate or defect but also whether to continue the relationship or look elsewhere, and that their preference for partners, like their propensity to cooperate, is conditioned by the outcomes of the interactions. Neighbors do not interact equally with everyone on the

street. While they may prefer the convenience of interacting with those next door or with those who share common attributes, it is entirely plausible that, all things being equal, they will prefer those with whom they enjoy a successful exchange. This includes of course those they are able to exploit, but now we assume that their victim, instead of retaliating in the next round, may simply walk away.

The original model can thus be elaborated by having the players modify their loyalty to their current interactor based on the same algorithm for transitional probabilities that modifies their propensities to cooperate or defect. If two randomly paired players happen to cooperate, the reward strengthens not only their willingness to cooperate again but also their propensity to stay with their current partner instead of searching for someone else. The players thus have a second payoff-conditioned propensity that shapes the structure of the network. The shape of the network in turn affects the feasibility of stochastic collusion.

It should not be surprising that relationships based on mutual attraction would be more conducive to solidarity than are random pairings. Rational actors can be expected to cooperate more readily with trusted associates than with strangers whose strategies are unknown and whom they may never see again. Learning theory arrives at a similar conclusion but for a different reason: any nonrandom pairings (and not just those produced by player preferences) reduce the number of decisions that must be stochastically synchronized to induce a mutually reinforcing collaboration and break free of anomic equilibrium. If everyone interacts randomly, anomie tends to prevail.

The simulations confirm this but also reveal an unexpected difficulty. When anomie prevails, everyone tends to interact randomly. The obstacle to cooperation is the instability associated with initiating stochastic collusion. Since players at equilibrium are noncooperative, escape typically begins with a series of *DD* rather than *CC*. While double defection has the same effect on cooperative propensities as *CC*, it has the opposite effect on mutual attraction. A sequence of double defections encourages both players to question the wisdom and propriety of their antisocial behavior, as well as the continuation of their relationship. The players may become more cooperative, but not with each other, thus undermining the synchronization needed to achieve lock in. Only attractions built on mutual cooperation will lead to stable interaction. Hence, players at noncooperative equilibrium may be expected to have fleeting relationships based on weak and fickle preferences and an aversion to suitors. The unstable pairings in turn impede escape from noncooperative equilibrium. In short, elective relationships appear to be more effective for preserving collusion where solidarity is already thriving than for getting collective action started in an anomic environment.

But now suppose the contestants cannot all afford to be equally choosy about whom they want to relate to. The payoffs in the Prisoner's Dilemma may be hypothesized to operate not only as reinforcements but also as *resources* that weight the preferences they condition. Better-endowed players enjoy the option of rebuffing those whom they find unattractive and waiting for someone more desirable. Resource-poor contestants, on the other hand, may not be able to afford that luxury. In social exchange, the more one has of what others want, the easier it is to find a client. Resources also confer the ability to choose and dismiss subordinates, as well as restrict or gain access to offices, neighborhoods, or clubs, as suggested in the large stratification literature on exclusionary practices and social closure. In short, the more resources players accumulate, the greater latitude they have in deciding with whom to share them. And depending upon what happens in the exchange, those resources may or may not continue to accumulate.

Forced interactions in which the victim cannot escape might be expected to promote exploitation compared to interactions where unwanted advances can be spurned. The paradox, however, is that it is the other way around. Figure 7 shows how asymmetric pairings are more conducive to collective action than are relationships based on mutual consent. The simulation begins with random preferences for partners and equal resource endowments. The players then modify their attraction toward their current interactor as play proceeds, just as they did in the mutual-consent game. As resource inequalities emerge, based on accumulated winnings and losses, the better-endowed players pick first and the weakest pick last. Figure 7 indicates the mean propensity of the eight players who begin the game at noncooperative equilibrium. Compared to a game with identical reinforcements ( $\sigma = .1$  and  $\gamma = 2$ ) but consensual pairings, all eight players lock in mutual cooperation in about half as many iterations. (Lock-in is achieved at  $i = 43$ ,  $i = 52$ ,  $i = 90$ ,  $i = 122$ ,  $i = 158$ ,  $i = 208$ , and  $i = 251$ . Although the iterations required for lock-in remain unrealistically high, they rapidly decline as the magnitude of the reinforcement increases).

These simulations show once again how exits can undercut collective action, not for the reason given by rational choice theory, but because exits destabilize the emergent structure of the network. Consensual pairings cause relationships to be highly unstable at noncooperative equilibrium. This is not the case where exploitation is rewarded with the power to pick one's victim. The dominant player learns to hold on to those who typically cooperate and to abandon those who do not. Hence its victim will be relatively compliant initially, increasing the predator's accumulated winnings (thus enabling that player to remain dominant) as well as increasing the attraction to the victim. However, the victim eventually

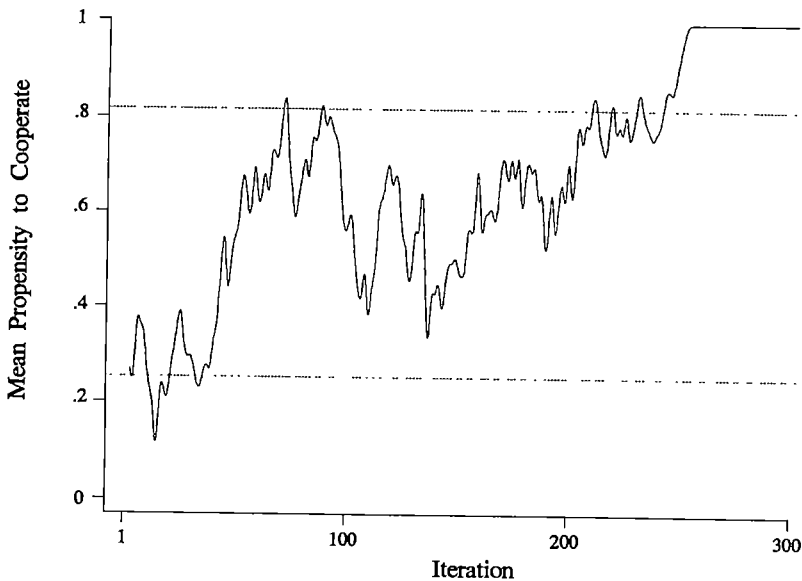


FIG. 7.—Effect of resource-weighted partner preferences on stochastic collusion ( $\sigma = .1$ ,  $\gamma = 2$ ,  $N = 8$ ).

comes to prefer making life miserable for its tormenter, even though it must suffer as well. Before the predator goes on the prowl for a fresh patsy, there is the chance that both players will learn that more can be gained by collaboration. Pairings based on resource inequality are thus better able to withstand the destabilizing effects of the double defections needed to initially break out of anomic equilibrium, keeping the contestants together until stochastic collusion can begin to take hold. The simulations show that resourceful predators are more readily sobered when their victims cannot flee and must learn instead to fight, a compelling instance of the behavioral logic of exit and voice.

#### E. Invasion by Free Riders

Escaping the social trap is only half the difficulty. Once collective action is flourishing, the problem is reframed: How might solidarity be sustained in the face of invasion by free riders? Adaptive actors will not allow the appearance of a predator to alter their extant relationships so long as they are able to identify the intruder and alter their behavior accordingly. The difficulty arises where the free riders are hard to spot. The contamination is then likely to spread until it reaches every player linked to the intruder. Suppose a small, tightly knit neighborhood has secured univer-

sal compliance with the norm of tidying up after one's dog. No one likes to comply, but everyone likes to live where rules like this are effective. Then an unsocialized newcomer moves in. Each time a neighbor discovers an unpleasant violation in their driveway, their own enthusiasm for good citizenship declines, which in turn only increases the number of soiled shoes. It is not long before other norms begin to lose their grip, leading to a downward spiral in community obligation. The maxim is well known: "One rotten apple will spoil the barrel."

Unfortunately, the converse does not hold. One small candle turns out not to dispel the darkness. A good citizen who moves into a neighborhood of privatists will soon learn to play by the rules of the street. Privatism is readily exported; solidarity is not.

The solution to "backsliding" in the two-person game suggests one way that an invasion by inconspicuous free riders might be contained. While pragmatic (hence, decisive) responses are better at inducing stochastic collusion, the routinization of symbiotic exchange as socially appropriate behavior appears to be more helpful in maintaining solidarity in the face of invasion. Normative behavior slows the decay of solidarity, allowing victims of the intruder to recover their cooperative propensities through interaction with their comrades before being exploited again. Invasion by a free rider then turns the game into a variant of "freeze tag," but with the complication that victims of the intruder must be repeatedly "tagged" by their teammates to overcome the effects of a single encounter with "It." Thus, as more players become frozen, it is easier to freeze the rest. As an added risk, a victim that is frozen too long or too often is transformed into a confederate of It and then freezes his unsuspecting saviors. Retagging by teammates only restores solidarity if the victims of It remain almost certain to cooperate on the next move. Otherwise, interaction with former comrades leads to another incidence of exploitation rather than the mutual cooperation needed to recover from the effects of the previous tag. Rather than recovering through interaction with former teammates, they will instead spread the invasion further. Hence, the strategy is not likely to be effective except in very mild games where each player has many interactants and where the predator is badly outnumbered by cooperative players.

This is evident in figure 8, a relatively mild game with very small reinforcements ( $\gamma = .15$ ,  $\sigma = .01$ ). This models the low learning rates associated with attachment to rote decision rules, thus permitting ample opportunity for victims to recover. Consequently, the collectivists are able to sustain collusion for nearly 400 iterations (equivalent to 40 iterations with  $\sigma = .1$ ), despite random interactions with a lone predator.

Figure 8 also reveals the fundamental weakness of this strategy. Cooperative players can only postpone the inevitable unless a way can be

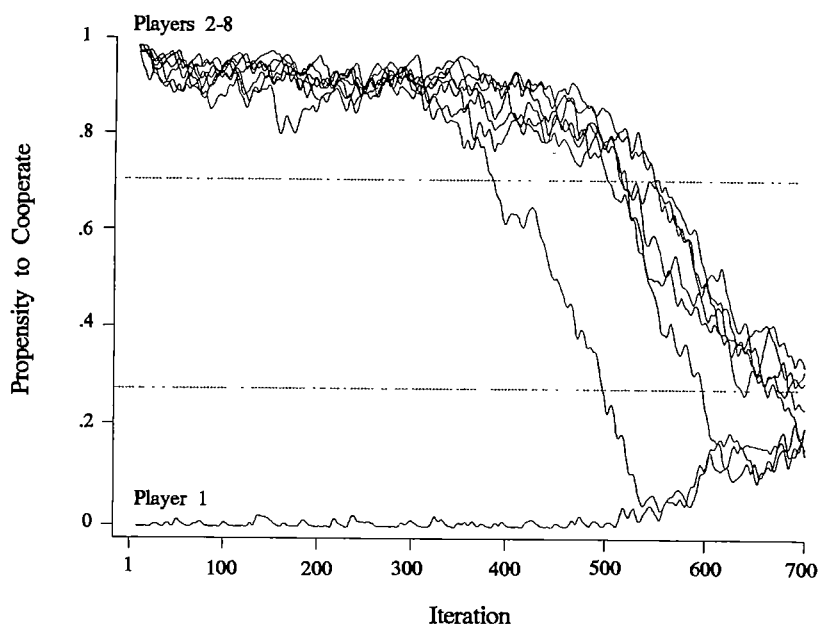


FIG. 8.—Collapse of normative solidarity caused by single defector ( $\sigma = .01$ ,  $\gamma = 1.5$ ,  $N = 8$ ).

found to convert the intruder. Eventually, one of the victims becomes a confederate, after which solidarity quickly deteriorates. The problem is that the collectivists are overly nice. Their strong commitment to turning the other cheek helps contain the contamination but also encourages the predator. Hence it is only a matter of time before lock-in collapses. Normative solidarity appears to be more effective as an antidote for occasional backsliding than as a defense against predators.

#### IV. SUMMARY AND CONCLUSION

A simple two-person stochastic learning model shows how mutual cooperation might arise despite the risk that free riders may take advantage of altruistic gestures. The social trap lurking at the conjunction of micro- and macroprocesses turns out to be a noncooperative equilibrium that even badly myopic instrumentalists can escape if they are able to shift course decisively in response to immediate outcomes. No foresight is necessary; the behavioral model assumes only that their cooperative propensities are shaped over time by social sanctions and cues. The claim is not that higher-order reasoning is never effective in securing cooperation, only that it cannot always be assumed to occur. This approach is

therefore applicable where actors do not grasp the strategic implications of an iterated Prisoner's Dilemma and must grope their way in response to social feedback. Social learning theory suggests the hypothesis that adaptive actors are led into a social trap more readily than are those able to look several moves ahead, but they are also better at finding their way out.

Once lock-in is attained, the problem is how to sustain collusion in the face of occasional backsliding. The simulations suggest that norms of civility are ineffective in getting cooperation started and are unlikely to emerge at noncooperative equilibrium due to the inconsistent sanctioning of behaviors. However, once the contestants have learned to collaborate as a pragmatic alternative to self-defeating conflict, the routinization of cooperation may promote the forgiveness needed to hold the alliance together over bumps in the road.

Extending the principle of stochastic collusion to multilateral encounters, computer simulations demonstrate the growing difficulty of securing collusion as the number of choices that must be synchronized increases. The findings corroborate the structural conditions usually thought to be conducive to collective action but show that the hypothesized effects of anonymity and "one-night stands" do not depend on the assumption that the actors appreciate the strategic implications of future exchange. The important cognitive skill is not the ability to estimate long-term cumulative returns but the ability to differentiate among multiple interactants. If the conditions required for tacit collusion in  $N$ -way interactions obtain, it is not necessary for self-interest to be enlightened by an appreciation of the long-term stakes.

If the players fail to differentiate, secondary sanctions (exogenous to the payoffs) may be needed to solve the coordination problem. Sanctions should not be focused on specific actors but should be broadly applied and timed to create a palpable nodal point for the synchronization of responses. Negative sanctions are needed where mutual defection is sub-optimal but painless. With very low rates of cooperation, the reinforcement of civic virtue encourages free riders as well. Once cooperation gains a foothold, however, this risk declines, and additional positive reinforcement can help pull the players over the threshold and into lock-in.

The model also has implications for the problem of sustaining collective action in the face of incursion by unsocialized newcomers. Adaptive actors risk generalizing the lessons of betrayal, causing the contamination to quickly spread throughout the network. Resistance to invasion therefore requires a period of consolidation after lock-in is attained so that cooperation can be routinized through repeated reinforcement. The response to occasional betrayal may then be sufficiently attenuated so that



victims of an intruder will be able to recover their solidarity through interaction with their comrades before being exploited again. Still, it is only a matter of time before they succumb.

These findings may be formalized as a series of hypotheses that might be tested using laboratory experiments. The purpose of the experiments is not to determine whether the subjects fail to exercise strategic foresight, but to test the conditions predicted to promote lock-in in the absence of opportunities for tacit collusion. Hence, it may be useful to alter the ability of the subjects to engineer a tacit collusion by varying the disclosure of the requisite information about the interdependence of choices and payoffs (the technique used by Rapoport and Chammah [1965]).

The following hypotheses are suggested by computer simulations of the two-player game with  $T > R > 0 > P > S$ .

HYPOTHESIS 1.—The probability of lock-in increases with the magnitude of the sanctions and decreases with the severity.

HYPOTHESIS 2.—If the payoffs are sufficiently large, the probability of lock-in will not increase with full disclosure of the choices and payoffs.

HYPOTHESIS 3.— $CD$  increases the probability of  $DD$  at the next move and decreases the probability of  $CC$ .

HYPOTHESIS 4.— $DD$  is not an absorbing state ( $DD$  eventually leads one or both players to cooperate).

HYPOTHESIS 5.—All else being equal, the greater the temptation to exploit ( $T$ ), the lower the incidence of  $CD$  prior to lock-in and the lower the probability of lock-in.

HYPOTHESIS 6.—The longer lock-in is sustained prior to a disturbance, the shorter the time to subsequent recovery.

The following hypotheses are suggested by simulations of the  $N$ -player game.

HYPOTHESIS 7.—If the subjects are unable to differentiate among multiple interactants, (a) the probability of lock-in will decrease exponentially with the average number of interactants of each player, and (b) full disclosure of the choices and payoffs will not increase the probability of lock-in.

HYPOTHESIS 8.—A secondary sanction (exogenous to the payoffs) is more effective in facilitating lock-in when divided among all actors at each iteration than when concentrated on one actor and rotated at each iteration.

HYPOTHESIS 9.—The longer lock-in is sustained prior to invasion by an unsocialized newcomer, the longer it takes for lock-in to collapse.

HYPOTHESIS 10.—The probability of lock-in increases when subjects are allowed to choose their interactant by mutual consent.

HYPOTHESIS 11.—The probability of lock-in increases further when

subjects are allowed to choose their interactant unilaterally (based on accumulated winnings).

These last two experiments with elective pairings signal a vast new research agenda, in which the structure of the network is no longer a given but a variable. Since contestants can usually choose not only whether to cooperate or defect but also whether to interact or withdraw, game theory can be used to explore how social structure might evolve in tandem with the collective action it makes possible. The  $N$ -player games provide an effective tool for mapping the rich complexity of structural arrangements that might emerge among interdependent actors. Contrary to the conventional wisdom, the analytic leverage of the game paradigm comes not from its reliance on rational choice theory but from the formalization of this web of mutually contingent relationships. Game theory would thus appear to be especially promising for sociology, the social science discipline that has been most reluctant to embrace it.

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## Commentary and Debate

To conserve space for the publication of original contributions to scholarship, the comments in this section must be limited to brief critiques. They are expected to address specific errors or flaws in articles and reviews published in the *AJS*. Comments on articles are not to exceed 1,500 words, those on reviews 750 words. Longer or less narrowly focused critiques should be submitted as articles. Authors of articles and reviews are invited to reply to comments, keeping their replies to the length of the specific comment. The *AJS* does not publish commenters' rebuttals to authors' replies. We reserve the right to reject inappropriate or excessively minor comments.

### COMMENT ON HOBSON'S REVIEW OF *DISTURBING THE NEST: FAMILY CHANGE AND DECLINE IN MODERN SOCIETIES*

In her review of my book *Disturbing the Nest* (*AJS* 96 [November 1990]: 774–76), Barbara Hobson is of course entitled to disagree with me. But she misconstrues so much of my argument that the reader must surely think that I am both empirically wrong and ideologically reactionary. To set the record straight:

1. I never define “familism” (that is my term, I do not know where she got “familialism”) “in terms of the ‘traditional’ family.” The definition she provides is my definition for the traditional family, not familism. I define familism as “the belief in a strong sense of family identification and loyalty, mutual assistance among family members, and a concern for the perpetuation of the family unit” (p. 212 in *Disturbing the Nest*). It is perfectly possible to have a familistic society along nontraditional lines, in my view, and indeed that is what I favor. I do not support a return to the traditional family.

2. She contends that “Swedish family history does not fit Popenoe’s conventional mapping of family change from extended to nuclear. Moreover, Popenoe’s prototype of the traditional family has not been a pervasive pattern for the majority of Swedes except for a short period after

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the war through the 1950s." She provides no evidence for the first statement, and the second statement is certainly wrong if we are speaking—as I unambiguously was—of a cultural norm and not a demographic reality.

3. She asserts that, "What Popenoe refers to as deviant life-styles, nonmarital cohabitation and children born outside of wedlock, are not [at] all deviant in the Swedish context" and suggests that I have an "insensitivity to context and social meanings." Yet I never refer to these conditions as deviant, and include a lengthy discussion of their historical background and accepted cultural standing.

What *she* fails to point out is that nonmarital couples, as a percentage of all couples, increased from 1% in 1960 to more than 25% today, quite a remarkable change. (Nonmarital cohabitation, of course, is the main reason for the high nonmarital birth rate, which increased from about 10% of all births in the late 1950s to more than 50% today.) The reason I use nonmarital cohabitation as a measure of family decline is not because it is deviant, but because the breakup rate of nonmarital couples (even those with children) is two to three times the breakup rate of married couples. This is an extremely important statistic to which Hobson fails even to allude.

4. She states: "Popenoe maintains that the traditional family has been undermined as a result of two movements. One is the greater number of women working outside the home. . . . The takeover of family functions by the welfare state is the second cause." Yet these are only two among many forces operating on the Swedish family that I discuss. She omits reference to the others, including economic security, individualism, the therapeutic ideology, secularism, and the Swedish national character. The importance of such selectivity is that it makes me appear to be resolutely antifeminist and anti-welfare state. A careful reading of the book will show that I am not.

5. I did not say, as she contends, that "we are now entering a post-nuclear-family era." Explicitly eschewing any iron laws and stating that no one can predict the future, what I did say was that if present trends are projected we will enter a post-nuclear-family era. Indeed, my belief is that many social trends tend to be cyclical, and there may well be a turnaround in family trends over the next few decades. In the book, I pointed out the new forces that could bring this turnaround about.

6. Finally, she concludes her review with what she believes to be a more correct perception of the welfare state than mine, emphasizing the importance of "generous parental leave benefits and long vacations," and "high-quality day care." I fully support such measures.

It is a shame that the empirically based subtleties of sociological analysis are so often overshadowed by the kind of ideologically driven debating that seemingly influenced this review. Life is not black and white but

shades of gray. And it is unfortunate the central point of my book was lost, that the welfare state, despite its undoubted benefits, has not solved the central problem of the modern family—its high breakup rate.

DAVID POPENOE

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## REPLY TO POPENOE

My review of *Disturbing the Nest* discussed the ideological sources shaping the author's analysis. David Popenoe has characterized this as "ideologically driven debating." Yet, a careful reading of this book reveals the extent to which Popenoe's personal moral worry about the changes in the family have driven its analytic strategies and the selection of evidence.

Popenoe, in his response to my review, has reconstructed his argument about Sweden. His central point, with which he ends his comment, is not that "the welfare state, despite its undoubted benefits, has not solved the central problem of the modern family—its high breakup rate." Rather he claims throughout his book that the Swedish family represents the most advanced stage of family decline. Furthermore, he maintains that the thrust in welfare state policies (what he refers to as the "logic of the welfare state") has undermined the family.

Popenoe insists that I have missed the empirically based subtleties of this book. Consider one of his key indicators of family decline, the problem of family dissolution. Having acknowledged that it is difficult to ascertain the breakup rate of Swedish couples since casual nonmarital cohabitation is included in the measures of dissolution, Popenoe nevertheless suggests that Sweden may now have the highest family dissolution rate in the industrialized world. With a subtle sleight of hand, he concludes that "assuming that this proposition is proven true by further empirical analysis, it is surely a prominent indicator of Sweden's world-leading move away from the traditional nuclear family" (p. 174 in *Disturbing the Nest*). Sweden is least like Popenoe's traditional nuclear family since his definition assumes a male breadwinner and a wife working full-time at home in unpaid labor. But one might consider the following statistics on the stability of Swedish families that Popenoe does not provide. The most recent national statistics (1989) shows that 80% of all Swedish children 17 years old or younger live with both biological parents (Swedish Statistical Central Bureau 1990). In the United States in 1985, approximately 50% of all children less than 18 years old were in families

with both biological parents (see Heidi Hartmann, "Working Parents: Differences and Similarities and Implications for a Policy Agenda," *IWPR*, November 19, 1990).

Furthermore, the "remarkable statistic" on the rise in nonmarital cohabitation from 1960–80 does not look that remarkable when viewed in its proper historical perspective. If one examines levels of premarital childbearing in 19th and 20th century Sweden (no comparable figures for cohabitation rates exist), then one finds a continuity in trends. The Swedish family sociologist Jan Trost maintains that the current form of cohabitation before marriage is equivalent to the long engagement period in Sweden, when betrothed couples had a sex life together—took vacations and spent weekends together. He estimates that nonmarital births were actually higher in 1900 than 1960 (see Trost, "A Renewed Social Institution: Non-Marital Cohabitation," *Acta Sociologica* 21, 1978). Moreover, several historians would challenge Popenoe's notion that the bourgeois nuclear family was an accepted cultural norm in Sweden (see, e.g., Matovic, *Stockholm Marriage*, 1985; and Lily "Scandinavian Peasants: An Exploratory Essay," *Ethnologica Scandinavia*, 1974, pp. 17–52).

One must query Popenoe about the significance of nonmarital cohabitation and family dissolution in a society where two-thirds of all couples marry after their first child is born. True, couples who have never cohabited before marriage have low dissolution rates. But only 10% of the cohort born 1951–55 never cohabited before marriage (see Hoem and Hoem, "Dissolution in Sweden," Research Reports in Demography no. 45, Stockholm University, 1988). Noncohabitants are a highly selective group; the vast majority are religiously active in a society where only 6% of the population claim to be.

In addition to the selectivity in empirical evidence, a reliance on journalistic accounts and informants undermine the stance of objectivity in this study. Take, for example, a sensational story from a West German magazine in the 1980s that labeled Sweden as the children's Gulag, where authorities took children away from their parents with ease. Popenoe takes this ideologically driven debate at face value, which has been discredited by researchers and policymakers alike (see the government report, SOU 1986, vol. 20).

Space limitations prevented me from addressing the various sources for family decline Popenoe alludes to in his response. Individualism and economic security, two of the sources mentioned, are corollaries of changing gender roles and welfare state policy. Popenoe concludes that individualism has come in conflict with family values mainly as a result of women's quest for self-fulfillment apart from the bourgeois family (p 305). According to Popenoe, the high degree of economic security in Sweden—a result of women's participation in the work force and the



guarantees of the welfare state (p. 221)—contribute to the weak family system with a high parental breakup rate. What he calls economic security, in effect, is women's lack of economic dependence on husbands' incomes.

When operationalized familism (the definition he refers to on p. 212 aside) cannot be disengaged from the traditional nuclear family organized around traditional gender roles. We can see this in his scenario for reversing "postnuclear" trends. Most important is a de-emphasis on self-fulfillment, and, as noted above, Popenoe believes that women's self-fulfillment is the crucial factor. Other forces that could turn the postnuclear family around are a new religiosity, economic decline and struggle, and a cyclical shift toward conservative policies (all point to a return to more traditional family). Where are the shades of gray?

Whether one calls it familism or familialism (my typographical error), it is difficult to imagine how Popenoe ascertains that "little recent legislation in Sweden expresses the value of familism"—if we take his definition seriously—"perpetuation of the family as a unit." All workers have six-weeks of paid vacation time to spend with their families; 90 days paid when children are sick; the right to work part-time, without losing one's job or pension years, until children are 7 years old; and 18 months parental leave with pay (12 months with 90% of one's income).

My critique of this book is not merely an ideological dispute, as he suggests, but an attempt to reveal the distorted lens through which he views familism in different societal contexts. I found little evidence to support his thesis that Sweden represents the vanguard of family decline.

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COMMENT ON BROWN'S REVIEW OF *SEARCH FOR SOCIETY: THE QUEST FOR A BIOSOCIAL SCIENCE AND MORALITY*

In his otherwise thoughtful review of *Search for Society* (*AJS* 96 [November 1990]: 752–53), Kevin L. Brown regards my argument about the development of the opposition to "the innate" in the social sciences as vitiated by a failure to distinguish between "innate ideas and biological predispositions" (p. 753). This is very puzzling since I not only make exactly that distinction, but make it a cornerstone of the analysis. As early as chapter 2, page 41, I note explicitly:

One must also note a curiosity: that hostility to the innate started as a hostility to the reactionary possibilities of innate *ideas*. . . . Thus men's *natures* could well be seen as having fixed features (Mill's greed and laziness) but this did not matter as long as their *ideas* could be changed. It was with the waning of the Enlightenment overvaluation of ideas and reason—the rise even of Darwinism—that the hostility was extended beyond the limits of Platonic innateness—of ideas—to feelings, sentiments, predispositions—in short to “instincts” broadly conceived.

The reference to Mill shows that I was well aware of the Utilitarians' need for “a theory of human nature,” and both Mill and the “moral sense school” (raised by Brown) are discussed at length in various parts of the book, especially with reference to Darwin's contribution. The distinction that bothers Brown is also discussed in several other places, especially on page 99, where the original Lockean attack on innate ideas is contrasted once again with the shift to the emphasis on “feelings and sentiments,” with special reference to romanticism, Schopenhauer, Darwin, and Freud.

I do not wish to comment on the conclusions reached by Brown—comment is free; but I do think that, in a book that is deliberately reaching out to the sociologists who were my original peers before I became, almost by accident, defined as an anthropologist, a matter of fact like this is worthy of correct representation.

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## SUBJECTIVISM IN EIGHTEENTH-CENTURY SOCIAL SCIENCE: REPLY TO FOX

The eighteenth century is often termed the “Age of Reason,” and it is correctly so termed if by the phrase is meant that it was the age in which philosophers held that the credibility of all things should be tested by reason. But from the point of view of its prevailing psychological doctrines, it could more properly be called the “Age of the Passions” because of its stress on the emotions and the instincts, the affections and aversions, and its playing down of the role of reason in the behavior of the ordinary man. [Viner 1949, p. 366]

Comment may be free, as Robin Fox remarks, but illogic has its cost in the amount of space required to disentangle a convoluted argument.

When I wrote my review of Robin Fox's book, I was well aware that he occasionally distinguished between innate ideas and the merely innate, but I was forced to ignore these lapses because, if made "a cornerstone of the analysis," then the entire edifice comes tumbling down. The theme of these two chapters (p. 67 in *Search for Society*) is that "the idea that social reformers must reject what we shall continue for convenience to call subjectivism—any suggestion that human nature was given or that ideas were innate, has . . . a long history" (note the failure to treat the two separately). In other words, the Enlightenment founders of social science and their heirs supposedly maintained an "overvaluation of ideas and reason" and rejected "subjectivist positions of whatever flavor" because of their "socialist/radical/liberal need for a doctrine of reform" (pp. 41, 85, 83).

My original review pointed out the poverty of the historical claim (see esp. Bryson 1945), and one need only compare this with Fox's (pp. 69, 70) claim (repeated in the above reply) that "even empiricists can have some notions of innate qualities," but that "this was not, to empiricists, a stumbling block as long as *ideas* were not innate" to reveal its logical worth, for if the Utilitarians accepted the idea "that human nature was given," then these reformers did not reject subjectivism as defined above. One simply cannot allow that "men's *natures* could well be seen as having fixed features" and then assert that "hostility to the innate started as a hostility to the reactionary possibilities of innate *ideas*." Since his thesis makes logical sense only if the rejection of innate ideas was linked historically with a rejection of "instincts' broadly conceived," it is only by *failing* to observe the distinction between innate ideas and biological predispositions that Fox (p. 91) can conveniently ignore what Jacob Viner and others have long known, that the idea that "scientific empiricism does not imply epistemological empiricism at all" was the inspiration for Enlightenment social science.

Indeed, these Utilitarians, characterized by Bryson (1945, p. 26) as being "determined to be empirical in their theory of morals," but mentioned by Fox (1989, p. 59) briefly only to be dismissed as being "epistemological empiricists in all other matters than moral," made their subjectivism empirical *precisely* by looking to the new science of natural history rather than by ignoring biology (Bryson 1945, pp. 53–63; Brown 1991). Fox (p. 104) claims that modern social science "must come to see that the only way out of its intellectual dilemmas, and its moral bankruptcy, is to embrace what nearly three centuries of dominant wisdom have told it is impossible and incompatible with its deepest convictions both scientific and ethical: the acceptance of an evolutionary theory of innate social capacities as the basis for a universalistic ethic of natural rights and a cognitive theory of truth," but it is well known among

intellectual historians that "Scottish naturalistic psychology . . . is a pre-Darwinian form of evolutionism in that it regards the attributes of nature's creatures to be ideally suited to the needs of the species" (Robinson 1986, p. 174; emphasis added).

In fact, the founders of American and British academic sociology (plus Pareto) readily accepted Darwin's unification of natural selection and utilitarianism as the foundation of their discipline (Brown 1990), with the moral sense doctrine even becoming the basis of the Chicago school's symbolic interactionism via Cooley's social psychology and Giddings's "consciousness of kind" (Gordon 1978). One need only look at the biosociology of radical reformers like Lester Ward, Franklin H. Giddings, and Charles Ellwood to see that the history of even modern sociology is filled with liberal, empiricist subjectivists who rejected the doctrine of innate ideas (Degler 1991), a species that according to Fox's (p. 84) thesis, either never evolved or was long since extinct. Indeed, Fox (pp. 85, 100) ultimately abandons his original claim that "the legacy of Locke was the indissoluble marriage of empiricism to reform," and hence the "rejection of subjectivist positions of whatever flavor," when he finally admits (without explanation) that it was not until Durkheim that "the empiricist agenda had to be extended to include all innate qualities, not just the ideas."

Rather than being a "cornerstone of the analysis," the distinction between innate ideas and the merely innate is both the logical and historical wrecking ball since neither logic nor history admits any connection between the two and since, without this link, it is pure nonsense to claim "that hostility to the innate started as a hostility to the reactionary possibilities of innate *ideas*." Only by failing to distinguish between innate ideas and biological predispositions by lumping both under the term "subjectivism" (or by using "empiricism" as its opposite) when convenient, and separating them when history rudely intrudes, is Fox able to combine the contradictory claims that there exists an "indissoluble marriage of empiricism to reform" but that even reform-minded "empiricists can have some notions of innate qualities" into a history of how "social reformers must reject . . . subjectivism" broadly defined. Thus as a sociologist committed to the biosocial approach, I regret that a "correct representation" of Robin Fox's views yields a confused account of "the legacy of Locke" that is the mirror image of current ideologically inspired objections to modern sociobiology, which "equate neo-Darwinism with neo-fascism" (p. 75), and, as such, is more likely to forestall than facilitate the reintroduction of biology into modern social thought.

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## Book Reviews

*State and Society in Medieval Europe: Gwynedd and Languedoc under Outside Rule.* By James Given. Ithaca, N.Y.: Cornell University Press, 1990. Pp. xii + 302. \$37.95 (cloth); \$15.95 (paper).

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One way to understand the state is to examine political organizations that are incontestably states. Another strategy is to study something whose status as a state is more uncertain and which explicitly problematizes the concept of state. *State and Society in Medieval Europe* follows the second strategy, with admirable results. James Given does a comparative analysis of the ways in which two regions (Gwynedd and Languedoc) were incorporated during the 13th century into two medieval "states" (England and France). He examines state building at a time when the king's government was the state. Given is a professional historian and so his decision to frame his analysis with the sociology-of-the-state literature is a welcome one for *AJS* readers but one that may earn him the scorn of his colleagues.

Given uses a "variation-finding" (p. 12) comparative strategy to select his cases. He compares what happened when two regions with very different levels of economic and political development were incorporated into roughly equal state structures. Given is particularly concerned with the effects of incorporation on indigenous social and political structures. He may not be doing multiple regression, but he is very interested in explaining variation.

The book unfolds as a series of chapters that focus upon particular aspects of medieval society and compare the two cases. Given begins by showing that the French and English monarchies were roughly similar, while Languedoc (the south-central area of France) and Gwynedd (northern Wales) were very different. Languedoc had a more developed economy and greater inequality, was more urbanized, and had a larger, wealthier and more politically active aristocracy than Gwynedd. It also took almost 70 years for Languedoc to fall to the Capetian monarchy, whereas Gwynedd was quickly subdued by Edward I.

Once victorious, the two monarchies established government institutions to rule over their new territories. The low level of political development in Gwynedd meant that the English monarchy faced an easy task. There was no prior state apparatus to contend with and no dominant ruling class. The English simply imported their system of government

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and set up shop. In contrast, the French monarchy had to contend with a more complicated and developed political system. Victory did not mean political *carte blanche* and so the French monarch had to tolerate rival political powers and political institutions that were interposed between the king and the subject populations.

Law was central to medieval governance, and so Given compares the legal systems through which the English and French monarchies ruled the new territories. As before, the contrast between preconquest Gwynedd and Languedoc was sharp because the indigenous Welsh legal system was much less developed. In both cases, the conquerors used law as a means of domination. English kings installed an English legal system and abolished the previous one. The French monarchy had to contend with a complex preexisting system of competing and overlapping jurisdictions. Royal courts never monopolized law and were, at best, first among equals.

When it came to the ownership of land, the basis for both political and economic power in medieval Europe, neither conquest resulted in large changes. The change that took place occurred among the ruling classes as the conquering ruling class displaced the conquered ruling class. The English were more effective than the French at installing themselves as overlords and making the indigenous population their tenants, but, nevertheless, life among subordinate classes continued as usual.

The English victory was catastrophic for native Welsh elites since they were almost completely excluded from the English state that ruled Gwynedd. English hegemony extinguished most of the internal conflicts that had riven Welsh society. Unified under the oppressive English, the Welsh resisted their new rulers for the next century. In contrast, Languedoc's native elites were not really displaced by the Capetian conquest, and so they continued to play an important role in the political life of Languedoc. Capetian rule did not end internal political conflicts and, at times, actually exacerbated them. Although French monarchs did not enjoy as strong a position as English monarchs, continued internal conflict prevented the various elements of Languedoc society from uniting and resisting French rule.

For the victors, the new territories represented sources of additional financial and military resources. English taxes were a real hardship for the Welsh, not only because English taxes were high, but also because the Welsh economy was unproductive and uncommercialized. With few opportunities to sell their goods in a market, it was difficult for Welsh farmers to raise the cash needed to pay taxes. By comparison, the impact of the Capetian monarchy was minimal. The survival of the political institutions gave the people of Languedoc many opportunities to resist the royal tax collectors. When such taxes were collected, Languedoc's active economy meant that there was no great hardship.

Given concludes that the most important factor in explaining the divergence of outcomes was the degree to which political authority was institutionalized before the imposition of outside rule. Higher institutionaliza-

tion forced the victor to compromise. Nothing stood in the way of the English state, but the French state faced a tangled and dense network of political and juridical bodies. Given argues that the autonomy of the English state led to greater political instability. The French state was less autonomous in Languedoc and enjoyed greater stability.

Given writes clearly and pursues his analysis systematically, marshaling evidence from both primary and secondary sources. His detailed comparison will certainly revise and specify the sweeping arguments that readers of Charles Tilly and Perry Anderson are familiar with. An impressive amount of work has gone into this book, with equally impressive results.

*Yankee Leviathan: The Origins of Central State Authority in America, 1859–1877.* By Richard Franklin Bensel. New York: Cambridge University Press, 1990. Pp. xi + 452. \$52.50 (cloth); \$18.95 (paper).

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I know very little about American political history, and can claim no expertise concerning the dramatically important phase of it discussed in *Yankee Leviathan*. While I must thus warn readers not to place too much reliance on my judgment of this book, I will say that I consider it most impressive, and that I would expect it to stand for years as an exemplar of successful integration between political science and history.

The ingredients of its success are the following: first, a topic of such intrinsic significance and complexity that, while it had already attracted much prime effort in both those fields of scholarship, it has so far eluded what could be reasonably called definitive treatment; second, a sophisticated awareness of existent theoretical models that can be brought to bear on the topic, coupled with a lack of reverent overcommitment to any of them and a willingness to develop a fresh approach; third, scrupulous observance of the prime rule of scientific method, which (as is well known) reads “grab hold of your topic and hit it with everything you’ve got.”

To elaborate on the last ingredient a bit: Bensel, besides (apparently) mastering the last generation of scholarly work on the political and economic aspects of the Civil War and of its aftermath, has explored a number of primary sources (e.g., financial periodicals), mapped electoral returns, thoroughly analyzed the congressional voting records concerning many legislative issues, and reconstructed the arrangements put in place during the Civil War on such matters as banking and currency. Furthermore, the book’s thematic richness matches its methodological scope: the last chapter, for instance, instructively confronts that well-seasoned query, “Why no socialism in the United States?” and its more recent companion, “Why is the United States *welfare-poor*?”



The first merit of Bensel's book lies probably in the extent to which it confirms and qualifies one broad generalization that most sociological literature draws from the European experience, to the effect that, by and large, state development is war centered. Bensel states: "Union victory . . . created the American state by conferring upon it the fundamental attributes of territorial and governmental sovereignty" (p. 2). This qualifies that generalization somewhat: in the American case (essentially, as in the English one, for geographical reasons) it cannot be said that the state constituted itself *for* war; rather, the Civil War imparted a quantum jump to the development of a state that had a somewhat different *raison d'être*. Bensel argues this point with reference to both parties to the conflict; in fact, he shows that it applies even more to the Confederacy than to the Union, for most of the carefully conceptualized variables he designates collectively with the expression "statism" showed a sharper growth gradient, during the war, in the South than in the North. (To this extent, his title is potentially misleading: of the two warring states, it was not the Yankee one that, on the book's persuasive evidence, was more "leviathanized" by the war.)

A second generalization, which Bensel persuasively confirms for the American case, indicates the critical role played in state development by a hegemonic party: in this case, the Republican party. This is of course a narrower generalization, applying only to the postdynastic, mass-politics phase of the story of the modern state, and perhaps Bensel himself does not adequately explore its significance for comparative analysis. His analysis of the postbellum decay of the Republican coalition is more detailed than his account of the role it had played in the previous decade or so, although he does indicate clearly that the coalition, because of its unswerving commitment to the Union's survival, had been the "major agent guiding administrative expansion and the most important force propelling centralization" (p. 367).

I will state only two reservations concerning this excellent book, both relating to its central thesis, that is, the state-building role of the Civil War. First, Bensel suggests that, since the two warring states had a great deal in common in their constitutional structures, one can attribute to their respective social bases the different extent to which and the ways in which they underwent "statalization" during the war. However, as he himself recognizes, many of those differences resulted from the disproportion in their industrial resources rather than from the political propensities, respectively, of the social components of the Republican coalition in the North and of the plantocracy in the South. In the nature of the case, these two sets of variables are confounded to such an extent that they weaken Bensel's explanatory strategy. Second, he barely discusses what happened to the individual states during and immediately after the war, both in the North and in the South. Thus one does not learn whether and to what extent the building up of the (con)federal state power took place at the expense of state governments or instead filled, so to speak, a previously government-free space. But the book's scholarly achieve-

ment is of such magnitude that both reservations may well strike its readers as quibbles.

*Understanding Contemporary Ireland: State, Class and Development in the Republic of Ireland.* By Richard Breen, Damien Hannan, David Rottman, and Christopher Whelan. New York: St. Martin's, 1990. Pp. xii + 248. \$39.95.

Denis O'Hearn

*University of Wisconsin—Madison*

With few exceptions, academic publications about post-1950s Ireland describe poverty and emigration without analyzing their systemic origins. Recently, a few mild critiques have come from a state-sponsored research institute in Dublin. Among these is *Understanding Contemporary Ireland*.

The book is replete with empirical evidence about Ireland's economic stagnation: the disjuncture between economic growth and job creation; the failure of welfare programs to improve conditions for the poor; inadequacies of the tax system; failed neocorporation in Irish industrial relations; and poverty and inequality on the land. The chapters on education and the family are especially good and point to the limitation imposed on a state that funds social programs, the implementation of which is in outside hands (the Catholic church).

The book is best when the authors modify their state autonomy/capacity approach (from Skocpol) to argue that the capacity of the Irish state was ultimately constrained by its reliance on the market (p. 47). This left it unable to implement policies that were unfavorable to capital, such as taxing profits. But the authors fail to realize that "autonomy" is a very limited analytical concept if someone or something is constraining the state to follow the rules of free enterprise, and if these rules are set by powerful actors, including transnational capital. Thus, although the authors briefly refer to Ireland as "dependent," they write as if practically every policy after the watershed year of 1958, even if it was ultimately unsuccessful, had been independently and rationally implemented by the state. We are left with a state that introduces an ever-expanding set of contradictory policies that are doomed to failure.

Why they are doomed to failure cannot be fully explained by the state-centered model. The authors cite Peter Evans, that state economic interventions tend, over time, to diminish state capacities. This formulation works fairly well regarding certain social policies that come under outside control (although there is still a tendency to equate the level of state spending with "autonomous intervention"). It fails to explain economic dynamics, especially in the context of world capitalism (Europe and the United States are hardly mentioned).

The problem begins with the assumption that the transition from

import-substitution to export-orientation, and subsequent policies, were initiated and controlled by state planners in the Finance Department—that is, that “state policies . . . initiated late industrialization” (p. 1). The authors recognize that the central features of the post-1958 system were free trade and foreign domination of investments and exports. But nowhere do they mention U.S. and European pressures, starting with the Marshall Plan, to liberalize the Irish economy. Nor do they recognize that the 1957 document that supposedly “revolutionized” the Irish economy (T. K. Whitaker’s *Economic Development*) ignored foreign investment, simply rehashing the tenet that state expenditures must be “productive” rather than “unproductive.” Likewise, the authors treat subsequent economic plans (exercise of “state autonomy”) as if they were responsible for the introduction of foreign investments and the massive rise of exports during the 1960s. In reality, the plans did not cover foreign investments, and one was even constructed with exports as a residual.

The real action concerned the Industrial Development Authority (set up under pressure from the Marshall Plan planners and against the wishes of the Finance Department), the state body that attracts foreign investors by giving them what they want. If state industrial policy was designed primarily to attract foreign investment, and if we expand our idea of class to include international capital, the concept of autonomy seems rather limited.

If we assume an “autonomous” state, failures logically become failures of state capacity. This deflects attention from the structural effects of free trade, foreign domination, and free enterprise. The authors briefly admit that the recent “diminution of State autonomy” came mainly “from external sources” and that state capacity is now “in reality quite limited” (pp. 46–47). But instead of fully examining its systemic origins, they blame this on the emergence of interest groups in the course of economic development. Thus, their solution is a corporate agreement among government, trade unions, and capital to control public expenditure, accelerate growth, remove inequities in taxation and expenditure, and create opportunities for all citizens (p. 220). Presumably this would recapitalize the state, enabling austerity measures. This does not answer how to fix a *system* that relies on decreasingly available foreign capital, where growth is associated with net job losses, where important policy instruments lie in Brussels and Washington, within an unevenly developed Europe, in a more unevenly developed world-capitalist system.

A final critical omission is that the Irish in the north are never mentioned. After hundreds of years of colonialism and 20 years of British army terror, the ultimate blow is to be ignored by those in the republic who, in their rush to be modern Europeans, do not consider their brothers and sisters to be an essential part of “understanding contemporary Ireland.”

*Slavery in the Circuit of Sugar: Martinique and the World Economy, 1830–1848* by Dale W. Tomich. Baltimore, Md.: Johns Hopkins University Press, 1990. Pp. xiv + 353. \$46.50.

Christopher Chase-Dunn  
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There are now a large number of what may be called “in the world-system” studies that focus on a specific locality and time period, while examining the larger structural context within which local social change occurs. Though many of these are excellent, Dale Tomich’s study of Martinique between 1830 and 1848 goes well beyond the others. In addition to painting the larger context, Tomich discovers the actual links and contradictory interactions between global-level, intermediate, and local processes. His study shows how the French and Haitian revolutions, the struggle between Britain and France, Britain’s victory and reshaping of the global economy, French recovery and protectionism, the politics of tariffs and interest groups contending within the French state, and the limitations of slave-based sugar production on Martinique interacted to produce the crisis of colonial production on this Caribbean island colony of France. This is historical sociology from the bottom up, from the top down, and with close attention paid to those actors and structures operating in between.

The restructuring of interstate relations and the international division of labor in the first half of the 19th century radically transformed the rules of the game for producers of colonial products such as sugar. The rising British hegemony reconstituted world-market and political structures, including forcible intervention by the British Navy in the slave trade between Africa and the New World. The French organized a defensive response to rising British hegemony that included tariff protectionism and the reinvigoration of colonial production for the mother country. This gave slave production of sugar in Martinique and other French colonies a new lease on life, and, ironically, the relationship between metropolis and colony became temporarily reversed as French consumers paid very high prices and the French state heavily subsidized colonial sugar producers. The emergence of sugar beet production in France and pressures for trade liberalization eventually popped the slave-sugar bubble.

Tomich provides a close study of the technical and social aspects of the process of sugar production as it was performed on Martinique. His detailed examination of the institution of slavery as it operated on Martinique is a valuable contribution to the comparative literature on the labor process. The main body of the book analyzes the forces and constraints that shaped the organizational and technological aspects of sugar production during this period. This reveals the multilevel legal, political, financial, and ecological constraints that inhibited the reorganization of sugar

production on Martinique. The expansion of sugar exports was accomplished primarily through the creation of new, small plantations on marginal land and the intensification of slave labor. This is contrasted to developments on those Caribbean islands that were turning to sugar production for the first time, such as Puerto Rico and Cuba, where larger-scale plantations and sugar-processing mills were being developed.

In an interesting theoretical chapter, Tomich develops a general discussion of commodified slavery that employs Marx's concept of labor power and the distinction between constant and variable capital to argue that commodified slavery constrains the reorganization of production processes to a greater extent than does wage labor because slave-owning capitalists are unable to separate the maintenance costs and capital costs of slave labor from the direct costs of applying labor to production. Tomich argues that wage labor is superior in this regard because the capitalist only pays for labor power and can easily calculate the direct costs of labor in production. This encourages the rational use of labor power and the implementation of labor-saving devices when it is economical. He concludes that slavery is less likely to be reorganized in response to market pressures than wage labor because planters cannot easily separate the costs of slave *labor* from the costs of maintenance of the slaves. And this is advanced as part of the explanation for the technological stagnation evident in the sugar expansion on Martinique.

There are two problems with this argument. First, if the ability to calculate production versus maintenance and capital costs separately was so important to capitalists, they would only rent machines, not buy them. Tomich contends that slaves are part of "constant" capital, like machines. This does not seem to be a big problem for the rational utilization of machines. Second, one important reason for the collapse of French colonial sugar production was the greater scale of production and greater efficiency of other competing producers (e.g., in Cuba and Puerto Rico) who were also *using slave labor*. Perhaps slave labor is less amenable to technological change than wage labor is (because it is often less flexible), but this cannot be the main reason why Martinique failed to rationalize production. Tomich's own analysis reveals many other important factors that operated as constraints and disincentives to the rationalization of sugar production on Martinique.

One of the main developments that created the crisis of plantation agriculture in the 19th century was the abolition of the slave trade and the abolition of slavery. This obviously had little to do with the "irrationality" of slave production from the point of view of the slave-owning planters, who fought abolition, tooth and nail. Tomich declares that it is beyond the scope of his study to analyze the causes of the British decision to clamp down on slavery. He says on page 29, "The same historical processes of development of the world economy that led to the abolition of slavery within the British empire resulted in its expansion and intensification outside of the empire," but he does not tell us what these processes were. There are several structural theories that explain

abolition, and it would not have been irrelevant to Tomich's purposes for him to tell us his judgment of these.

Though my quibbles may need to be addressed in future research, Tomich's is one of the very best works in the categories of Caribbean studies and "in the world-system" linkage studies. The book will be widely read by scholars of plantation slavery, French colonialism, and the 19th-century world-system. It will also be useful in advanced courses on historical sociology, development studies, and global restructuring.

*Domination and the Arts of Resistance: Hidden Transcripts.* By James C. Scott. New Haven, Conn.: Yale University Press, 1990. Pp. xiii + 251. \$29.95.

Bob Scribner  
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James C. Scott, already well known for two studies of subordination and resistance in Southeast Asia, here attempts a more general comparative discussion of themes raised in his earlier work: the nature of domination and hegemony and the ways in which the powerless and the weak survive, resist, and sometimes effectively break through relationships of subjection. He has chosen a wide canvas on which to paint his comparative picture, seeking out examples of slaves, serfs, untouchables, and colonized and subjugated peoples from the early modern period to the present (indeed, some of his comments even relate to the recent dramatic changes in Eastern Europe). His main line of argument is straightforward enough. He first indicates the performances that characterize the public forms of social subordination (in his terminology, the *public transcript*) in order to contrast it with a disguised and covert discourse (the *hidden transcript*) that takes place offstage, out of the earshot, and so away from the surveillance of the powerful. Most of the book is taken up with an analysis of the many forms of this hidden transcript and its ramifications: the ways in which the powerless create for themselves social space, alternative ideologies, dissident subcultures, and forms of disguised, low profile, and undisclosed resistance, what Scott calls "infrapolitics."

Much of this argument is derived from the perceptions of Eric Hobsbawm and E. P. Thompson about the nature of peasant resistance, but it is here explored in a comparative framework and cross-fertilized by a awareness of the nature and complexities of power inspired by Foucault. However, Scott's analysis is more subtle and incisive than any of the authorities he cites in pointing to the many layers of feigned speech, gesture, and practice that fill out the enacted roles of domination and subordination. Thus, he is well aware that the dominant also have their own hidden transcript, and that to attempt to understand the nature of hegemony without awareness of the need of the dominant to "keep up appearances" would be to misunderstand radically the nature of the

relationship between powerful and powerless. Subordinate groups have their own vested interest in colluding to preserve the appearances acted out by the public transcript, since this allows them more free play for their own hidden agendas. Scott provides here a penetrating critique of theories of hegemony and false consciousness that see the subordinates as unreflecting consumers of dominant ideologies and that attribute manipulative skills solely to the powerful. In a wide-ranging discussion of the possibilities of "the arts of political disguise," Scott points to the effective ability of the powerless to create their own distinctive "voice under domination." In a final chapter, he brings out the value of his analysis for an understanding of how previously quiescent groups can suddenly leap into open resistance. Moments of social electricity that generate charismatic acts and precipitate what Scott calls "a saturnalia of power" do not arise *ex nihilo*, but are rooted in the structure of the hidden transcripts long since internalized by social actors who suddenly declare that the public performance of hegemony is, after all, only a play.

Scott makes good use of the insights of sociolinguistics and occasional, but cautious, use of work in social psychology. His recurrent metaphors of social dramaturgy suggest parallels with the work of social anthropologists such as Clifford Geertz or Victor Turner, although there is no discernible influence from this direction. Scott uses the metaphors of performance, acting, masking, and role-playing in his own independent and effectively suggestive way. He is also well aware of the hermeneutic problems of dealing with forms of hidden discourse, and his analysis is both careful and cogent. There was only one section that seemed less than persuasive to me: his discussion of carnivals, rituals of reversal, and other forms of symbolic inversion. Historians of early modern Europe have now discussed these phenomena extensively and learned the need for more interpretative caution than Scott shows here. One must also note that Scott's use of the relevant and recent scholarship from this field is not always as effective as it might have been. This may sound grudging toward a book that so skillfully encompasses so many areas of scholarship, but in one crucial example, that of the "drummer of Niklas-hausen," highlighted twice in Scott's discussion, it has led him into some crass error through his relying on the controversial and often inaccurate work of Lionel Rothkrug, while ignoring the definitive 1980 work by Klaus Arnold. However, this is a minor blemish, indeed, in a very fine and suggestive book that has opened up many new avenues of exploration for all social scientists interested in the deeper complexities of power relationships.

*The Reconquest of Montreal: Language Policy and Social Change in a Bilingual City.* By Marc V. Levine. Philadelphia: Temple University Press, 1990. Pp. xviii + 285. \$39.95.

*The English-Only Question: An Official Language for Americans?* By Dennis Baron. New Haven, Conn.: Yale University Press, 1990. Pp. xxi + 226. \$22.50.

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Why do language choices become a matter of public policy? What aspects of language are susceptible to official decision making, with what effects on the society and state? Posing and answering such questions helps one understand much about a political system. Open debate about a language issue reflects and contributes to social change and political development more often than it reflects a narrow communication problem. In the past three decades, demands for bilingual education in the United States and threats of Quebec secession have inspired studies about the significance of language movements and government responses. Two recent books are additions to a growing literature about the politics of language.

Dennis Baron synthesizes 200 years of discussion about language in the United States, while Marc V. Levine focuses on the city of Montreal. The scopes are very different, but the conclusions are similar: market forces may in the long run be more important than explicit policies, but governments are forced to legislate by interest groups, public opinion, and conflict.

Marc Levine's book, *The Reconquest of Montreal*, is a model of scholarship and good writing. It is strictly a case study: How did a language movement transform Montreal from an Anglophone to a Francophone city? How did the French language triumph in the schools and in public administration? How did a new French-speaking middle class win control of an important part of the economy? How were French symbols validated?

Dennis Baron's book, *The English-Only Question*, reads like an essay. The author's purpose is to answer a single question, to wit, Is it desirable or necessary to pass an amendment to the Constitution making English the official language? While Levine understands and approves the French majority's taking back some control of the economy and society, Baron is decidedly unsympathetic to the official English movement: efforts to make English official are a repetition of efforts "since before the country's founding" (p. xiii) and will not work. He overstates the negative attributes of this movement, but he admits some failures of the bilingual movement.

More specifically, Levine clearly explains the foundations of minority English power, and the nature of French elite agreement with it in Que-



bec before 1960. Migration of rural French speakers to Montreal, their fears of Francophone decline, and anger at economic weakness and low status motivated action by a new urban middle class. Taking control of the provincial government and increasing the size of the provincial bureaucracy, they engineered new forms of state intervention, including language policy. The battles from 1977 to 1990 over the famous Bill 101 are well explained. Using quantitative data and a wide variety of other materials, Levine lucidly demonstrates the triumph of French in the schools, the decline of income disparities based on language, the rise of a French managerial elite, the growth of French-owned enterprises using capital from state-controlled funds, and the greater use of French in the workplace. He completes the circle by exploring the effects of language policy on interest groups and subsequent elections. Paradoxically, some Francophone entrepreneurs now oppose the very state intervention that helped them become entrepreneurs, and some people of French origin now oppose the assimilation of West Indians and others into the Francophone community.

Levine admits there is no specific answer to the role of public policy and that Quebec's problems have not been resolved. Other authors have presented this material and these conclusions, but Levine's clear and well-written focus on Montreal is a contribution: "The rise of separatism in Quebec [was] fueled by Montreal's linguistic tensions" (p. 90). It continues to be.

South of the Canadian border most Americans accept English as the *de facto* official language. Nonetheless, English speakers feared the existence of large groups of German speakers early in American history and large groups of Spanish speakers today; as a result they called for policies to discourage or even suppress the use of such tongues. In Baron's view "language has always been an important symbolic issue in the United States" (p. xix).

In telling the story of this Anglo activism, Baron is very dependent on previous works by Kloss, Higham, Veltman, Fishman, Heath, and Leibowitz. He summarizes them well and adds his own interesting material about efforts to promote language policy in the various states: German in Pennsylvania during the state constitutional convention, the decline of French in Louisiana, the delay in granting statehood to New Mexico because of the widespread use of Spanish there. Baron finds it easier to label the villains and the victims than I would, but his judgments make for lively reading. What presents a greater problem is that he raises some important issues without investigating the implications, and he makes important assertions without proof. For example, he mentions in passing that Benjamin Lee Worff and Edward Sapir claimed that language structure influences perception. But, so what—even if it is true? How does that affect the later discussion? He asserts without proof that "switching to English is all but certain to produce feelings of anxiety, guilt, or alienation in those experiencing language loss" (p. 194). Heavy stuff, but not serious scholarship. He too easily claims that even

if Hispanics learn English, their socioeconomic position will not improve. For proof he refers to another scholar's judgment. Such a device is unacceptable particularly when, as Levine points out, it is possible to correlate language skills and income differences. The international comparisons in the last chapter are useful and interesting, but what is one to make of the following: "Unlike France, which treated its language as private property, imperial England officially encouraged the spread of English in its colonies" (pp. 185–86). The fact is that no country has done more through language policy to spread its language than France.

In sum, Levine's scholarly volume is a useful addition to the literature on Quebec and on the effects of social movements; Baron's book is a provocative essay that could be usefully supplemented with a recent book edited by Gary Imhoff, *Learning in Two Languages: From Conflict to Consensus in the Reorganization of Schools* (New Brunswick, N.J.: Transaction, 1990). All three works are contributions to a developing area of inquiry, the politics of language.

*The New Chosen People: Immigrants in the United States.* By Guillermina Jasso and Mark R. Rosenzweig. New York: Russell Sage, 1990. Pp. xxxv + 460. \$49.95.

Douglas S. Massey  
*University of Chicago*

*The New Chosen People* is the latest volume in the Census Monograph Series created by the Russell Sage Foundation to convert "the vast statistical yield of the 1980 census into authoritative analyses of major changes and trends in American life" (p. vii). The series is intended to provide an overview of the U.S. population for a general readership, and most of its volumes have been fairly descriptive. But immigration is a uniquely complex process and data available through the census alone—principally statistics on the foreign-born—can be misleading when used to make inferences about U.S. immigrants and the processes that brought them here.

The authors have therefore broadened their view by supplementing 1980 census data with comparative information from the 1900, 1960, and 1970 censuses, statistics from the Immigration and Naturalization Service, and a special data file constructed for the 1971 immigrant cohort. The intelligent use of these data requires knowing their strengths and weaknesses as well as understanding U.S. immigration policies; it also demands a knowledge of the means by which immigrants select themselves, as well as the processes by which some remain while others return home. After being selected in these multiple ways, U.S. immigrants are truly the "new chosen people" of the book's title, but understanding these complex selection processes requires more sophisticated analytic techniques than graphs and tables alone.

The end result is a carefully crafted and detailed analysis of U.S. immigration that is incisive, perceptive, and extremely informative. The book begins with a lucid, but detailed treatment of the evolution of U.S. immigration policy to reveal "how the chosen are chosen." In successive chapters, it takes up the topics of naturalization, emigration, the immigrant marriage market, family reunification, the immigration multiplier, immigrants in the U.S. economy, English language proficiency, refugees, and the behavior of immigrants' children. The volume ends with a look at the future that assesses the likely effects of recent changes in U.S. immigration policy.

To do justice to the complexity of these topics, the authors present an abundance of data from a variety of sources that are analyzed in nearly 200 graphs and tables. These exhibits draw upon methods ranging from simple cross-tabulation to least squares regression to maximum-likelihood probit models to ordered probit techniques. The sheer amount and detail of the data presented, the complexity of the discussion, and the sophistication of the analytic methods provide a remarkably comprehensive treatment of contemporary U.S. immigration, but one that is probably over the heads of general readers. Rather than being a sourcebook for the educated public, therefore, the volume is more likely to become an indispensable tool for immigration specialists. The book is nonetheless general enough to appeal to social scientists from a variety of disciplines.

The authors of the *New Chosen People* have self-consciously decided not to present statistical profiles of immigrants from different countries of origin—the usual stuff of census monographs. Rather, they attempt to educate the reader about the multiple processes of immigration that give rise to the patterns we observe in census data on the foreign-born, who include not only legal immigrants but naturalized citizens, temporary visitors, and undocumented migrants. Interesting or salient patterns pertaining to specific countries of origin are discussed, but primarily to illustrate some selective migration process and how it may or may not have been captured in census data. Although descriptive material is presented, these tables do not constitute the heart of the book. The understanding the authors seek to impart is clearly general and conceptual rather than specific and concrete.

Working through the successive chapters, the reader gradually develops a comprehensive understanding of immigration processes and how they are shaped by U.S. immigration law. The theoretical approach that sustains the book is that immigrants are rational actors who seek to improve their well-being by migrating to the United States. The gain achieved by moving depends on the migrant's motivations, skills, and resources and how they are rewarded in the United States and the country of origin, the accuracy of information about conditions and life in the United States, and the costs of movement, entry, and adjustment. These factors are influenced by U.S. immigration policies and by the history of previous immigration. The authors pay particular attention to the roles played by marriage and kinship in structuring migration processes.

This approach is remarkably effective in explaining the mechanics by which immigrants come to the United States and remain long enough to be counted in the census. This contribution is important. In a period when immigration constitutes such a large share of U.S. population growth, it is remarkable how few scholars really understand the subtle interplay of personal motivations, social structures, and legal conventions that constitute the U.S. immigration system. Jasso and Rosenzweig clearly understand it well and have done a valuable service by explaining it so clearly.

*Ethnic Options: Choosing Identities in America.* By Mary C. Waters. Berkeley and Los Angeles: University of California Press, 1990. Pp. xvii + 197. \$32.50 (cloth); \$11.95 (paper).

William L. Yancey  
*Temple University*

This book explores the meaning of ethnicity among members of the white middle class who, in spite of their apparent assimilation, gave an ethnic response to the 1980 census question on ancestry. Waters conducted interviews with "snowball" samples, 60 third- and fourth-generation white Catholics of European extraction living outside San Jose, California, and Philadelphia. Her careful analysis of these in-depth interviews results in a series of rich observations into the processes and consequences of ethnicity among middle-class suburbanites.

By analyzing the 1980 census, recent surveys, and her interviews, Waters demonstrates that, far from being an automatic labeling of an inherited characteristic, ethnic identification is a dynamic social phenomenon. Its importance and its content change—between and within generations. Respondents simplified their ethnic identities, narrowing the choice from a wide range of alternatives. None of the factors that influence ethnic choice is reliable. Ancestors are mixed as a consequence of intermarriage. Names change. An identity based on physical appearance reflects a stereotype, not necessarily ancestry. Waters concludes that, given the available latitude, ethnicity is largely a matter of personal choice.

She observes a wide range of ethnic attachment. Some respondents merely named the country of one of their ancestors. Others reported a strong group attachment and believed their ethnic background had a significant influence on their lives, although little discrimination was perceived. Their residential areas were not dominated by any particular group. The salient geographic boundaries were between white and non-white neighborhoods. The same was true of intermarriage. Racial, and to a lesser degree religious, boundaries influenced the choice of marriage partners. Thus the important boundaries separated "black from white,

white from Asian, Jew from Catholic. Not Pole from Italian or German from English" (p. 114).

Cultural indicators of ethnicity did exist and were meaningful. Yet the substance of the ethnic cultures were constructed by individuals from characteristics of their family, what they believed to be ethnic, and from cultural stereotypes. As a consequence what respondents presented as ethnic culture was little more than idiosyncratic family practices, middle-class values, and ethnic stereotypes. The resulting incoherence of ethnic cultures is illustrated by one respondent who celebrated her Irish ethnic identity by eating sauerkraut.

In sum, for these middle-class, white suburbanites, ethnicity is voluntary. It has little or no effect on life chances. The content of ethnic culture is suspect. Yet, in spite of its marginal/superfluous character, it is maintained. Waters develops two explanations for the maintenance of symbolic ethnicity.

First, she argues that symbolic ethnicity fulfills the American need to be "from somewhere." It provides a sense of community and culture with no cost to individuality and mobility. Unlike many communities, the voluntary community of symbolic ethnicity provides a sense of identity without constraints. Second, she observes that the flexible, symbolic, and voluntary nature of ethnicity for middle-class white Americans stands in sharp contrast to the involuntary ethnicity of Asian, African, and Hispanic Americans. Yet, white ethnics do not see the difference. The symbolic ethnicity of whites, coupled with the belief that their ancestors also suffered discrimination, contributes to white ethnics' not understanding or sympathizing with the experience of racial minorities. Symbolic ethnicity among whites exacerbates racial misunderstanding and conflict.

What emerges from this analysis showing the interdependence of symbolic ethnicity with racist ideology is the political basis of ethnic and racial boundaries. My only regret is that Waters's sample did not include respondents who were not middle class. Without them we do not have an indication of the degree to which symbolic ethnicity is dependent upon the structural conditions of middle-class, white suburbia. One suspects that similar patterns of ethnic change, choice, construction of ethnic culture, and lack of sympathy for racial minorities is also to be found among whites of other classes.

*Black Americans' Views of Racial Inequality: The Dream Deferred.* By Lee Sigelman and Susan Welch. New York: Cambridge University Press, 1991. Pp. xi + 214. \$22.95.

Reynolds Farley  
*University of Michigan*

This is an important, informative, and valuable book. The black-white color line continues to divide our society and is at the heart of current

debates about public policies. Thanks to an array of studies conducted over the past half-century, we have an extensive knowledge of how whites view blacks and whether or not they endorse various civil rights laws. Our knowledge of the changing attitudes of blacks is meager. Sigel-Sigelman and Welch devote this book to a cogent analysis of how black Americans think about racial inequality, and how they evaluate possible ameliorative strategies. Moving beyond the description of trends in attitudes, they argue that blacks and whites have basically different perceptions of the racial situation. Nevertheless, blacks and whites share many common views and, within the black community, just as within the white, there is tremendous variation in opinions about what strategies, if any, should be implemented. Basic sources of data were the ABC News/Washington Post surveys, especially the 1986 study with its comprehensive analysis of black attitudes; the 1985 and 1986 General Social Surveys (GSS) of the National Opinion Research Center, and, to a lesser degree, the 1984 National Black Election Study, as well as numerous other national and local surveys. Throughout the study, the attitudes of whites are compared with those of blacks.

A specific theoretical model underlies this investigation. Sigelman and Welch begin with the socioeconomic status of blacks and argue that this influences the perceptions blacks have of racial inequality. These, in turn, influence the explanations invoked for the major black-white discrepancies that continue to exist, and these explanations are assumed to affect the public policies a respondent advocates or opposes.

Blacks, much more so than whites, perceive extensive persisting prejudice and discrimination, leading these authors to repeatedly argue that blacks and whites occupy separate perceptual worlds. In essence they contend there is a racial difference in how the social world is seen. Controls for socioeconomic status, for example, do little to minimize the black-white differences in the perception of discrimination and, in almost all comparisons, blacks of high economic status have attitudes more similar to those of impoverished blacks than to those of high-status whites.

Explanations for the limited achievements of blacks are classified as either situational discrimination; that is, caused by white opposition to black advancement and the limited access of blacks to education or dispositional discrimination caused by blacks having less ability to learn, lacking will power, and creating problems for themselves. Blacks endorsed situational factors, specifically discrimination, much more often than whites, but recent surveys report that the most popular explanation among whites is that blacks lack access to education. And, a majority of blacks agree that "discrimination has unfairly held down blacks, but many of the problems which blacks in this country have today are brought on by blacks themselves." There is, perhaps, more black-white consensus about the reasons for racial disparities than these authors imply.

Within the black community, there is little agreement about support for governmental policies that might improve the status of blacks.

Blacks, to be certain, endorse governmental intervention and assistance more often than whites, and blacks who perceive discrimination as the major problem are particularly likely to approve such policies. However, blacks and whites share a skepticism about the effectiveness and appropriateness of busing, welfare, and affirmative action. In brief, there is only modest support for the hypothesis that blacks and whites differ in their support for governmental policies because they differ in their views of the causes of racial inequalities.

The arguments of Sigelman and Welch about reasons for support of public policies are provocative, but not beyond challenge. In this book and in the most recent GSS, there is evidence that blacks and whites agree that there is much racial discrimination in the job and housing market. The racial disparity is about the consequences of this widely recognized discrimination. Blacks, I believe, are likely to see such discrimination as blocking opportunities, whereas whites assume that, if blacks had the willpower and motivation, they would overcome this discrimination. These authors might have strengthened their argument had they tested this hypothesis and linked it to support for intervention strategies.

The authors provide an excellent comprehensive bibliography and use footnotes frequently to describe their own efforts, the findings of others, and the precise wording of survey questions. The book has a scholarly mien. For example, Sigelman and Welch show that the proportion of blacks supporting affirmative action in employment ranged from a low of 23% to a high of 96%, depending on how it is described. Support among whites ranged from 9%–76%. It is always challenging to present findings from complex statistical models, such as the probit ones used in this book, to assess relationships between perceptions, attitudes, and policy recommendations. Too much detail will deter some readers, but insufficient information about estimation procedures will expose the authors to criticism from others. These investigations strive for the appropriate balance.

This book provides a concise but thorough investigation of the attitudes about racial issues that blacks have. It may continue to be the dominating reference work in this area until investigators follow the recommendations for new research described in the final chapter.

*Race and Schooling in the South, 1880–1950: An Economic History.* By Robert A. Margo. Chicago: University of Chicago Press, 1990. Pp. x + 164. \$24.50.

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Adult black males in the United States earned about 45% as much as white males in 1900. After little change for 40 years, blacks' earnings

began to improve after 1940, reaching a level of 61% of white incomes in 1980. Why did the racial gap in earnings remain resistant to change for so long?

Robert Margo examines two principal explanations for the earnings gap to which he adds a third. Human capital theories assign primary importance to differences in educational attainment. Before 1950, most blacks lived in the South, and southern states assigned blacks to inferior, racially segregated public schools. Stability in the earnings ratio before 1940 was due to blacks' lower educational attainments, which in turn was a result of the inferior schooling available to blacks in the South.

Proponents of an institutional perspective claim that equalizing educational opportunities would have had little effect on black incomes because discrimination trapped blacks in low-income jobs. Racial prejudice produced "dualistic labor markets" (p. 94), which confined most blacks to agricultural occupations and prevented them from competing with whites for higher paying, nonfarm jobs.

Margo proposes an "eclectic synthesis" of the human capital and institutional models with what he calls "intergenerational drag" (p. 3). Even if educational opportunities had been equal, higher initial levels of black poverty and illiteracy would have produced lower levels of educational achievement among blacks than whites. The three theories are evaluated through creative quantitative analyses of rich data compiled from a variety of sources: the public use samples of the censuses of 1900, 1910, 1940, and 1950; reports of state superintendents of education for various southern states; and county data from various U.S. censuses. Some of the analyses were previously published; most are new.

Illiteracy and school attendance rates for blacks and whites gradually converged between 1880 and 1950. Nevertheless after southern blacks were disfranchised, the relative quality of black schools declined dramatically as indicated by per pupil expenditures, length of school year, and class sizes. The trend reversed after 1935 and much of the black disadvantage was eliminated by 1950. Most of the inequality in per pupil expenditures was due to inequality in teacher salaries. In three southern states, black teachers received lower salaries because of discrimination rather than inferior qualifications.

Equalizing schooling would have reduced the racial gaps in school attendance and literacy rates but would not have eliminated them. Racial differences in family background characteristics added to the impact of unequal schooling opportunities. For example, Margo estimates that racial differences in adult literacy rates accounted for half of the difference in the school attendance rates of children.

The schooling disadvantages suffered by southern blacks diminished their employment prospects as human capital theories predict, but the effects were modest. Racial discrimination was much more important in restricting blacks' access to higher paying jobs than were differences in education. Furthermore, the constraints of "discrimination and social norms" were broken by shocks to the southern economy (e.g., the world



wars and the civil rights movement) rather than increases in blacks' education (p. 107).

Education did not significantly improve the earnings of most southern blacks, but it did increase the likelihood that they would emigrate to the North. Furthermore, blacks who emigrated often improved their economic prospects. Long-term migrants tended to find better jobs than blacks who were born in the North. Black emigration rates would have exceeded white rates if the education of southern blacks and whites had been equalized. Hence, schooling differences could not account for racial differences in emigration. Race mattered as well. Margo argues that educational discrimination defended the interests of southern white elites because it protected a supply of low-wage labor for decades.

Sociologists will probably be somewhat uncomfortable with Margo's economistic view of income determination and the demand for schooling. To me, his research provides stronger support for institutionalist theories than he believes. Because state-enforced discrimination limited blacks' school opportunities, the effects attributed to "human capital" and "intergenerational lag" are due in part to institutional arrangements. Political institutions reduced blacks' opportunities to invest in human capital; any investments actually made were not fully rewarded by economic institutions.

The author ignores much relevant work by sociologists. For example, Margo's claim concerning "intergenerational lag" closely resembles William Julius Wilson's argument that current income inequality is partly due to past rather than present discrimination (*The Declining Significance of Race* [Chicago: University of Chicago, 1978]). Edna Bonacich's work on split labor markets is not mentioned. In *A Piece of the Pie*, Stanley Lieberman (Berkeley: University of California Press, 1980) describes a pattern of differences in education between northern-born blacks and native whites that is remarkably similar to the pattern of southern school discrimination described by Margo. Is this coincidence or were similar processes at work in the two regions, at least in part? My complaints notwithstanding, this book is a very important contribution to the cumulating research on the determinants of racial income differences in the United States and racial differences in schooling in the South. I commend it highly to scholars interested in these subjects.

*Learning Together: A History of Coeducation in American Public Schools.* By David Tyack and Elisabeth Hansot. New Haven, Conn.: Yale University Press; New York: Russell Sage Foundation, 1990. Pp. ix + 369. \$29.95.

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In *Learning Together*, David Tyack and Elisabeth Hansot pose the central question of why Americans have chosen to educate boys and girls together in public schools. In the American context coeducation has not only been widely practiced but also has been largely taken for granted. Tyack and Hansot convincingly argue that the practice of coeducation begs for explanation. Ironically, coeducation was institutionalized at the same time that 19th-century Americans were busily creating separate spheres in the adult world for men and women. The taking for granted of coeducation is fascinating from a comparative perspective as well, since in most European countries, boys and girls were educated separately until recent decades. The closest they come to an explanation for coeducation, however, is that a lack of economies of scale in 19th-century (largely rural) America precluded same-sex schools—it was hard enough to provide one mixed school in sparsely settled areas—and that, once coeducation was established, it persisted organizationally.

The authors easily establish that coeducation has gone largely unchallenged (save for some questioning of the practice during the second half of the 19th century, when critics worried about the “contamination” of native-born white girls from immigrant and working-class boys) and then shift their analysis. Most of the book discusses the degree of public debate over gender differentiation within mixed-sex schools; coeducation, of course, did not preclude differential treatment of boys and girls. But significant public discussion of gendered education practices occurred episodically and was often linked, they claim, to episodic public anxiety over gender. In the early 20th century, for example, Americans worried about changing gender roles, particularly the disturbing increase in women’s paid labor. Girls outnumbered and outperformed boys in the rapidly expanding high schools. Critics reasoned that something must be wrong with schools if girls did better than boys and introduced a number of reforms to reshape schools to suit boys better (to “masculinize” education), including vocational education and competitive sports. Vocational education offerings were differentiated by gender, and home economics was instituted to prepare women better for traditional family roles.

The second major period they analyze is the 1970s, when feminists challenged the unequal treatment of boys and girls in school, both in terms of formal institutional rules and the “hidden curriculum.” This followed the women’s movement’s questioning of gender inequality in public life. The reforms that were most successfully implemented were

those that were under some measure of central control—greater equality in funding for sports (through title IX legislation) and textbook revision (a few publishing houses dominate the market).

Despite the interest and value of the authors' discussion of debate over gender differentiation, there are a number of major problems that limit this book's usefulness. First, the introduction promises an analysis of *why* coeducation was institutionalized in the United States, but instead the authors deliver a description of variation in gender policies within coeducational schools in selected time periods. The authors set for themselves (see pp. 3–4) the mission of explaining why—why coeducation, why there was so little debate, why it spread so rapidly—but they do not succeed.

Second, the analysis founders on a methodological impossibility: explaining something that did not vary within the case they examine (the United States). To determine why coeducation happened, comparisons must be made with times or places in which coeducation was not practiced. Given the historical invariance in the United States, their question demands a comparative approach. The European context provides numerous examples of systems of mostly single-sex schools, but Tyack and Hansot are historians of American education. Thus they shift their emphasis (problem 1). In essence, they let their methodology (historical analysis of U.S. education) reshape their research questions, rather than choose the methodology (comparative analysis) that is appropriate to their original questions. This is understandable given the rigid specialization by time and place that is common in history, but it undermines their ability to address their original theoretical questions.

Finally, even their explanation of why public debate over gender differentiation within coeducation emerged when it did (during periods of public anxiety over gender roles in general) is incomplete. An alternative explanation of the debate during the early 20th century, for example, is that it was precipitated by a change internal to education: the increase in the number of students in upper grades, and the consequent change in emphasis from "the three R's" and character development (for which goals were similar for both sexes) to preparation for adult occupational responsibilities (which were and had been differentiated by gender). In other words, I suspect that if the rapid increases in high school enrollments had occurred at a time when public anxiety over gender roles was minimal, the increase alone would have triggered an examination of the "proper" gender differentiation of the curriculum.

I enjoyed this book and recommend it for anyone interested in gender practices within public coeducation in the United States. But I cannot help but be annoyed that the authors did not deliver what they promised. I really wanted to come away with an understanding of why the practice of coeducation itself was so thoroughly institutionalized in the United States, and I did not.

*Social Structure and Self-Direction: A Comparative Analysis of the United States and Poland.* By Melvin L. Kohn and Kazimierz M. Slomczynski with the collaboration of Carrie Schoenbach. Cambridge, Mass.: Basil Blackwell, 1990. Pp. xvii + 301. \$39.95.

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A quarter-century of contributions by Melvin Kohn and his colleagues define a substantial cumulative research program, complete with extensions, replications, and refinements. For research at the intersection of the social-stratification position, work, and personality, the program defines a core body of knowledge and offers the standard for quantitative contributions. *Social Structure and Self-Direction* continues the tradition, not as a capstone but as another significant milestone in a longer journey. For the reader who carefully follows the program, the book contains relatively little that is new or not easily anticipated from earlier journal articles. For the novice or the irregular follower, the book is particularly nice because it is set up as an integrated research text—not an edited volume of journal articles—and because the early chapters thoroughly review the conceptualization and measurement of the key concepts and the last chapter offers a comprehensive critical review of the program, its strengths, weaknesses, and criticisms during the 1980s.

The main contribution of the book is to extend the research program in two directions: (1) replication of the basic U.S. model on a probability sample from a socialist society, Poland in 1978, and (2) expansion of the conceptualization of social structure beyond standard dimensions of the social-stratification position to include classic categories of social class. Recall that the central thesis of the larger program asserts that the social-stratification position (education, occupational status, income) is a substantial determinant of psychological functioning (values, cognitions, and orientations to self and society), but principally because higher positions in the social-stratification order afford greater opportunities for occupational self-direction (substantive complexity of work, routinization, and closeness of supervision). The hypothesized mechanism through which social structure affects personality is learning-generalization: men and women—in this book, mostly men—directly learn from the immediate conditions of their work and generalize these lessons to other realms of life.

The replication of the base model in Poland draws on about 1,500 adult, employed men living in urban areas in 1978. A smaller subsample gathered information from children and their mothers. The replication is conceptual and approximate rather than word-for-word and indicator-for-indicator, but most would judge it fairly close, careful, and reasonable. The U.S.-based results (a national sample of adult employed men, studied in 1964 and 1974) are closely reproduced in Poland, with one

major exception and several minor ones. The major exception is distress. In the United States, occupational self-direction ameliorates men's senses of distress; it fails to do so in Poland and indeed, higher social stratification and social-class position may even increase distress, particularly for nonmanual workers and managers, mainly those who are not members of the Communist party (PUWP). Kohn and Slomczynski provide a crafty explication of some of the possible mechanisms that might explain the difference, but, in the end, these are less definitive than the difference itself.

The extension of the basic model to include social-class position departs from the work of Erik Wright but expressly rejects his class distinctions based on autonomy. Social class has a limited, country-specific meaning: in the United States, for example, its final categories of employers are the self-employed, managers, first-line supervisors, and nonmanual and manual workers. In Poland, somewhat different theoretical dimensions produce six final class categories: managers, first-line supervisors, nonmanual workers, production workers (in large-scale manufacturing and extractive enterprises), nonproduction workers, and the self-employed. As the authors note, this is neither a study of class dynamics nor a study of class and class consciousness. Rather, it is a study that takes specific measures of class and asks how they relate to a larger model of social stratification, occupational self-direction, and psychological functioning. And the central conclusion: class matters for psychological functioning, not as much as social-stratification position, but independently of it, and like social-stratification position, principally because higher class positions afford greater opportunities for occupational self-direction. This is the case for valuations of self-direction versus conformity for self and offspring, for intellectual functioning, and for self-confidence but not for sense of distress.

The limitations of *Social Structure and Self Direction* are more matters of omission than acts of commission, and they do not fatally threaten the central analyses and conclusions. The study neglects women, the Japanese data and comparisons, intermediate and larger levels of social structure, broader consideration of context and history, and Communist party membership. The noticeable absence of women, with the exception of some analyses of mothers and the transmission of values, is a legacy of earlier design decisions, but nevertheless this absence reminds us of the need to design studies to include the other half of the human population. The larger research program includes a careful replication (with C. Schooler and others) of a regional Japanese sample. The exclusion of more of the Japanese comparisons from this book is puzzling. Social structure has a precise but limited meaning: specific indicators for social-stratification position and social class. Other features of contexts, of labor markets, of organizational structures and so on are distant or missing. Further, discussion of the larger historical context of Poland as case study is missing: apparently this is contained in an earlier Polish language volume by Slomczynski and Kohn. Finally, membership in the Commu-

nist party, although measured in the data, does not directly figure into the measurement of social stratification or social class and is used only in a secondary way at one point in the analyses.

*Rights v. Conspiracy: A Sociological Essay on the History of Labour Law in the United States.* By Anthony Woodiwiss. New York: Berg, 1990. Pp. ix + 332. \$49.95.

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Oddly enough, labor law is rarely considered by sociologists. Study of the development of workplace law in the United States has been left to legal and labor-relations experts. Yet labor law is a sociological phenomenon, reflecting the balance of power in economic and political spheres between organized workers and capital and, further, providing insights into the role of the state in workplace relations. Thus, Anthony Woodiwiss's *Rights v. Conspiracy* constitutes a needed sociological treatise on U.S. labor law. Moreover, and to its much-deserved credit, *Rights v. Conspiracy* also provides a theoretically sophisticated and historically rich examination of this subject matter.

Labor law, like the state more generally, Woodiwiss tells us, is "relatively autonomous." To theorize the nature of law, the manner in which it develops, and its effect on workplace relations one must consider the economic, political, and ideological context of the law. But within these, at least partially determinative, social confines, Woodiwiss recognizes, the law has a degree of autonomy (he refers to the "play" in the law). The law's relative autonomy stems from "a discursive practice whose guiding methodological principle is 'consistency'" (p. 10). That is, judicial and congressional decision making is governed in part by adherence to a legal discursive logic that constrains and permits particular courses of reasoning, all the while maintaining its logical consistency.

But Woodiwiss's adoption of a Foucauldian theoretical framework allows him to give equal theoretical attention to the manner in which the methodological principle of consistency in legal reasoning is "always" articulated with substantive principles originating in larger society (p. 10). The substantive principles stemming from workplace relations that manifest themselves in labor law include "property," "contract," and, in days past, "conspiracy." It is this consonance between the methodological and substantive principles that restricts the law's autonomy to its *relative* state. Autonomy is relative because the substantive principles reflect, among other ideologies, those growing from class-based relations of power in larger society. Woodiwiss tells us, however, that these "extralegal" influences are best able to explain *why* particular legal issues and struggles arise when they do. To understand fully *how* specific legal decisions are made, one must consider, in addition, the internally logical

structure of legal discourse. And so Woodiwiss comes full circle theoretically, recognizing simultaneously the autonomy of the law and the determination of other political, economic, and ideological forces—both, of course, in their relative fashions.

Woodiwiss's historical analysis of the development of law reveals generally three periods of law or rather three historically situated legal "discursive structures." The delineation of periods is not altogether new, but the historical depth and theoretical rigor of the analysis make it rich. The rise and fall of each discursive structure is explained simultaneously by the mobilizations of both capital and labor and the necessarily logical development of law. The emergence, during the early decade of the 19th century, of the "doctrine of criminal conspiracy," which was used first to restrict organization and later to restrict collective action among workers, is explained not only by the growing influence of the nascent capitalist class but also by the absence of a legal ideology supporting freedom of association among workers (although Woodiwiss does not explain why capital had begun to achieve its legal capacity to associate during these years).

After what Woodiwiss refers to as a hiatus of legal intervention in workplace affairs during the mid-19th century (which he unfortunately does not fully explain), the labor injunction emerged as a legal instrument to restrain worker militancy. The injunction surfaced in the context of the growing strength of monopoly capital, an increasingly organized labor movement, and the heightened conflict between them. But again the specific form of the disciplinary instrument was the product of developments in legal thought involving concepts of equity, tort, property, and, as in earlier years, conspiracy. Finally, the third legal discursive structure defines the post-New Deal period of labor rights or, as Woodiwiss also refers to it, a period of the corporate liberal state. The crisis of capitalism of the 1930s brought major change to the structure of the state and its intervention in workplace relations. A body of collective labor rights was the specific legal product of the crisis because the law had come to recognize the legality of unions and, with the passage of the Wagner Act, the ability of the state to protect this and other rights of labor.

The theoretical advances of this work, along with their successful application to the history of U.S. labor law, make its contribution significant. Although the book's discussion is often dense, sometimes legalistic, and in places downright opaque, distilling its argument is worth the effort. And although Woodiwiss overextends his criticisms of the critical legal theorists in attempting to establish his own argument, his own argument is stimulating and important.

*Dating, Mating and Marriage.* By Martin King Whyte. New York: Aldine de Gruyter, 1990. Pp. x + 325. \$44.95 (cloth); \$24.95 (paper).

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Martin King Whyte nicely frames a number of questions about 20th-century family and family change in the United States in *Dating, Mating and Marriage*. With respect to dating, for instance, he asks: Do Americans now begin to date earlier? Do they become intimate sooner? Do they have more dating partners? Do the answers to these questions vary among subpopulations? To address these questions, Whyte constructed a large set of response items that comprised the heart of the questionnaire administered to a cross-section of ever-married women residing in the Detroit metropolitan area: the 1984 Detroit Area Study (DAS).

Unfortunately, Whyte's book sheds little light on the very interesting questions he poses. Four major weaknesses limit the book's contribution and challenge many of the reported findings. First, a number of the questions posed are better (and have already been) answered with existing, nationally representative data sets. For example, we know from many national surveys that age at first intercourse is younger now than in the past. This stronger evidence is not described in any detail by Whyte. In cases such as this, the DAS evidence presented is not very important. The DAS survey and the book should have built on what was already known. Thus more focused questions could have been asked, such as: Why has age at first intercourse declined?

Second, the cross-sectional design, used by Whyte, is a weak one for addressing issues of change. Whyte compares three marriage generations, those married 1925–44, 1945–64, and 1965–84. Whyte interprets all differences between marriage cohorts as reflecting secular change. He acknowledges the potential recall problems for the older respondents and attempts to deal with this by asking questions that older respondents could be expected to remember the answers to. But the weakness of the design goes deeper than the issue of recall. Surviving members of the 1925–44 marriage cohort may not be representative of those marrying in that period. More important, change across these "marriage generations" could reflect factors associated with aging. Given that previous DAS studies have asked many questions about family life, one wonders why the 1984 questionnaire did not include more questions from previous DAS surveys and why ones asked previously were not analyzed in conjunction with the 1984 data. Such a repeated cross-sectional design provides greater leverage for assessing secular change because the respondents' ages can be held constant when cohort comparisons are made.

Third, Whyte's sample includes only ever-married women. Results suffer a sample selection bias as a result. Moreover, given that age at marriage is rising and nonmarriage increasing, the bias for recent cohorts



is likely to be substantial. For example, the trend in cohabitation among those already married could miss much of the increasing trend among the most recent cohorts. Dating, mating, and marriage should be studied using full cohorts, not just those who marry.

Fourth, Whyte's causal inferences are frequently problematic. They arise in two forms. In some analyses independent variables are not necessarily temporally prior to dependent ones. Education of the wife is an independent variable in the equation predicting age at marriage, for instance. Clearly, marriage could causally affect school continuation. In addition, some dependent variables are events, such as age at first intercourse, age at first date, and age at first marriage. Whyte's failure to model exposure to the risk of these events has led to erroneous conclusions. To illustrate, Whyte claims that "dating popularity" increases age at marriage, but he measures dating popularity by combining three responses: number of different people the woman remembered dating, the number of partners the woman "went steady with," and the number of men she considered marrying. Note that each of these measures will tend to increase for women who do not marry at a young age. In other words, if women marry at a young age, they have a shorter time period to accumulate total dates or steady boyfriends. Thus the association documented (a positive association between "dating popularity" and age at marriage) is likely to be fully a function of age at marriage, the exact opposite direction of the causation postulated by Whyte.

This book attempts to answer "everything you ever wanted to know about dating, mating, and marriage" by using a survey of ever-married Detroit residents. Preferred strategies would have been to compliment what we already know with more detailed and focused questions than those asked in other surveys. Alternatively, the impressive set of U.S. public use data sets (including earlier DAS surveys) could have been used in conjunction with the 1984 DAS data. By trying to answer so many questions (many that cannot be effectively addressed by a single cross-sectional survey that does not include event-history data), Whyte frequently is forced to adopt weak analytic designs and problematic measurements. Such decisions limit his ability to reach sound and informative conclusions with regard to dating, mating, and marriage in the United States.

*Women, Work and Marriage in Urban India: A Study of Dual- and Single-Earner Couples.* By G. N. Ramu. Newbury Park, Calif.: Sage, 1989. Pp. 206. \$24.00

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Since the early 1970s, answers to the question of how wives' employment affects domestic arrangements and the balance of spousal power have

been pursued vigorously by sociologists. The past 10 years in particular have witnessed a panoply of studies examining patterns of work participation and domestic relations among dual-earner couples. Research in this area, however, has focused largely on practices among married men and women in the United States, Canada, and Europe. Few studies have featured a sustained analysis of the effect of wives' employment on the contours of marital and domestic life in newly industrializing societies. Thus, we have yet to develop a clear understanding of how urbanization and industrialization might transform family life, marital role structure, and the status of women within different cultural contexts.

G. N. Ramu's resourceful study of Indian dual- and single-earner couples living in a rapidly urbanizing environment sheds light on these issues, although it illuminates the similarities to the U.S. and European patterns than the departures from them. Ramu's approach is exploratory, guided mainly by a working hypothesis that employment status has no effect on the attitudes and behavior regarding marital and family relationships among wives. Husbands' attitudes and behavior are also directly investigated, although—as is more often than not true in studies of this type—men remain rather shadowy figures in the descriptive accounts of real domestic situations. Nevertheless, despite the absence of a strongly motivated theoretical stance and the somewhat asymmetrical focus on wives, this well-written volume yields a great deal of information on patterns of marital conflict and accommodation accompanying Indian wives' employment.

Ramu's data are drawn from a purposive sample of workers from three major public-sector industries in Bangalore, a city of nearly 3 million people and the capital of the Indian state of Karnataka. The sample is distinctive in that these industries employ a comparatively high proportion of women workers and also manifest high levels of union activity, leading to relatively favorable conditions for working women. At the same time, highly segregated workplace conditions ease normative constraints on married women's employment, allaying the concern of husbands and others over the violation of cultural proscriptions against women's working alongside men. The effective sample consists of 245 single-earner couples and 245 dual-earner couples (980 respondents), where wives and husbands were interviewed separately.

The book features an introductory chapter that grounds the interview material in social and historical contexts and provides limited (though suggestive) quantitative findings regarding the extent of "traditional" versus "modern" orientations among sample husbands and wives. Chapters 2–4 constitute the bulk of the volume, focusing, respectively, on women's roles and decision making around wives' paid employment, the relationship between paid-work roles and the management of domestic tasks, and, finally, on how different family/work-role arrangements affect interpersonal rules of decision making, the balance of power, and levels of marital satisfaction.

For those readers who have encountered the literature on dual-earner

marriage, Ramu's findings will strike a familiar chord. Employed Indian wives cite economic need as the most important reason for their entry into and continued participation in paid work. Both dual-earner husbands and wives tend to regard the wife's employment as an activity aligned with the family's interest, rather than with her self-interest in career or personal development. The role of "primary provider" is nearly universally ascribed—by both men and women—to the husband, irrespective of whether he actually earns more than the wife. And it should come as no surprise that employed wives in urban India continue to perform most of the housework and child care within families. Indeed, dual-earner Indian husbands devote little more time to household tasks than do their single-earner counterparts. All of these results, in addition to those revealing positive associations between wife's employment, egalitarian styles of decision making, and marital satisfaction, correspond well with evidence on Western patterns.

Although the behavioral profiles of dual-earner couples in Ramu's study do not depart dramatically from those of such couples in the West, there *are* differences. On the basis of his interview data, Ramu argues that urban Indian wives fall into one of four camps: traditional housewives, neotraditional wives (those who willingly accept the double burden of employment and domestic responsibilities), reluctant housewives (those who wish to have paying jobs, but do not because of resistance from husband or family), and reluctant workers (those who wish to remain at home full-time, but continue to hold waged jobs for economic or other family reasons). Unlike the United States, in urban India there apparently exists no empirical basis for a category of wives who either attempt or openly desire some renegotiation of the work-role burden, particularly of those household tasks that are traditionally aligned with "women's work."

Another distinctive finding concerns the direction of gender differences in traditional versus modern orientations and attitudes (chap. 1). Regardless of the wife's employment status, wives appear to be more traditional than husbands—at least in the sense that the former report a greater influence of traditional institutions and collectivities (such as religion and caste) in their lives. Ramu finds an even greater gender discrepancy operating in the same direction with respect to sex-role and marital attitudes: even employed wives are much more likely to be traditional on these dimensions than are husbands.

Although the above results are among the more provocative in the book, the reader will want to regard them with caution, if not some skepticism. There are, unfortunately, apparent methodological and operational weaknesses. Self-perceptions of the past and present influence of one's religion and one's "community" (an ill-defined euphemism for caste or sect) are combined into an aggregate scale and then divided at the mean to separate traditionals from moderns. Although women are indeed slightly more likely to be traditional on this scale than modern—for men, the reverse holds—these differences do not appear to be statisti-

cally significant. Moreover, it is not entirely clear whether this scale taps some underlying dimension of "general personal-value orientation" or the degree to which religious or caste sanctions are viewed as determinative of individual life changes or options. Nor is it particularly clear how this measure of traditionality is expected to bear directly on attitudes and behavior toward women's work.

The traditionality/modernity index based on items measuring specific attitudes toward gender roles and marriage also has problems. All items pose attitudes aligned with a traditional stance, and almost all pertain to women's roles; they do not encompass gender roles per se. Another shortcoming involves the five-point Likert response scale for each item, where "1" represents "strongly agree," "5" represents "strongly disagree," and "3" represents "uncertain." It is unknown, but certainly conceivable, that the higher index values for husbands are an artifact of modal responses on "3," reflecting not so much their greater modernity in attitudes, but less certainty about or willingness to take a position on women's roles, either way. The extremely low variance in men's responses relative to those of women, regardless of wife's employment status, offers suggestive (and troubling) clues that this might indeed be the case.

These concerns aside, Ramu provides a rich document on the relationship between marital roles and women's status under conditions of rapid economic transition confronting urban, middle-class India. The value of his research lies primarily—and is most important—in its analysis of the complex ties among gender, work, and family from a perspective sensitive to social and cultural context. This very sensitivity renders the overarching similarities between Ramu's dual-earner couples and those living in the United States, Canada, and Europe all the more remarkable.

*Women Assemble: Women Workers and the New Industries in Inter-War Britain.* By Miriam Glucksmann. New York: Routledge, 1990. Pp. x+324. \$58.50 (cloth); \$15.95 (paper).

Vicki Smith  
*University of Pennsylvania*

Miriam Glucksmann, in *Women Assemble*, attempts to answer a question that has become standard on the scholarly feminist agenda: How are we to account for the sex segregation of occupations that has persistently and powerfully characterized women's employment? By conducting in-depth case studies of sex segregation in mass-production industries in the British interwar period, Glucksmann develops a structural theory about the political significance of such segregation. She wishes to redress what she sees as inadequate theories that ignore both the importance of gender as a variable in the analysis of class and the complexities of class formation under contemporary capitalism.

Glucksmann argues that as British capital restructured itself to enter new markets after the close of World War I, it shifted away from the production of heavy capital goods and toward the production of domestic consumer items. This shift entailed the widespread implementation of mass-production techniques and their hallmark form of labor process, the assembly line. And, according to Glucksmann, British employers sought women to fill the thousands of new positions that opened up on the line. Only women worked as assemblers in the new industries, Glucksmann argues, thus representing one historically important instance in which jobs were constructed and maintained along gendered lines.

Glucksmann is most adamant that, because these industries occupied a premier position in British economic development, it follows that women workers, drawn into assembly work in unprecedented numbers, gained a central, strategic position in the British working class. As industry and work itself were reorganized, women were incorporated more closely into the capitalist "production and consumption circuit": many more women were producing in the formal wage economy under new conditions of control and exploitation and were consuming, in the domestic arena, the very objects they were creating as new members of the working class. Thus, the introduction of the assembly line constituted women as a unique collective group in the economy.

This structural, socialist/feminist analysis, although intriguing in its description of an interdependent set of changes in women's lives, unfortunately fails in its efforts to prove that women emerged as a qualitatively new and important group in British industry and labor. I was not convinced that simply because women occupied historically new positions, they automatically became any more or less important in the configuration of British labor politics. Glucksmann is so intent on asserting a privileged class location for working women that she unquestioningly assumes class and gender politics from technical and organizational changes rather than substantiating the politics of the period.

*Women Assemble* is a frustrating, occasionally maddening book on other counts. While developing a structural theory about the interconnections between women's work in paid and unpaid arenas, Glucksmann relies heavily on ethnographic data without adequately acknowledging their limitations. The result is a disturbing lack of fit: her current interview data from a handful of women only weakly support her larger argument about past changes in the structure of production and economic exploitation.

Although simplistic accounts were common among Marxist scholars in the 1960s and early 1970s, numerous counterexamples now exist, in which British and American theorists have refined and gone far beyond reductionist Marxist insights about relations of production. But Glucksmann manages to dismiss the work of others studying class and the labor process, accusing them of ignoring both the heterogeneity of the working class and the ways that male and female workers have been

exploited differentially. Since Glucksmann fails to give specific references to these "bad" Marxists, however, it's difficult to know precisely whom she is taking to task.

In addition, Glucksmann frequently presents her findings as if they were novel, without citing relevant studies that previously made similar claims. She could have strengthened her argument significantly by locating her work more systematically within relevant bodies of literature (specifically, current works on the labor process and organizational structures). To mention just one glaring omission: Richard Edwards's study of the politics of assembly-line production (a Marxist analysis with conclusions compatible with Glucksmann's), a classic in the labor-process literature, is not acknowledged.

The fact that Glucksmann insists that scholars have ignored women's strategic importance in this period raises a final, troubling problem. The census data and labor-force statistics she presents on the exclusive positioning of women in assembly positions are fragmented and inconclusive, as she herself admits. Perhaps others have not asserted this claim because they have been more circumspect in drawing, from the available data, the grand and absolute conclusions that Glucksmann does.

*The Mexican Urban Household: Organizing for Self Defense.* By Henry A. Selby, Arthur D. Murphy, and Stephen A. Lorenzen with Ignacio Cabrera, Aida Castañeda, and Ignacio Ruiz Love. Austin: University of Texas Press, 1990. Pp. x + 238. \$27.50.

Edward E. Telles  
*University of California, Los Angeles*

After 40 years of economic expansion, Mexico, like many other Latin-American countries, has been devastated by a protracted economic crisis. Real wages fell by 40% between 1982 and 1988. Because of Mexico's extreme income inequality, many of its poor had already been living at subsistence levels.

On the basis of 20 years of fieldwork in 10 Mexican cities, Selby, Murphy, and Lorenzen in *The Mexican Urban Household* show how "ordinary" urban Mexicans manage to get by (or how the labor supply is maintained) under such circumstances. The unrelenting economic squeeze and the creative responses of individuals and families in organizing every available resource has led to a profound restructuring of the Mexican urban household.

The book contains three parts divided into nine chapters. Part 1 sets the scene in the substantive and methodological sense as well as through the insightful and vivid ethnographic account of the daily life and worldview of one of the characters, Señora Concepción Hernández. She holds strong views about an appropriate family size, the need to sacrifice to get through difficult points in the domestic cycle, and the importance

of education to mobility. The book is about her and other "ordinary" Mexicans like her who manage to survive at the level of "tolerable hardship" and avoid slipping into otherwise certain destitution.

Part 2 describes how families survive under such increasingly challenging economic circumstances. The authors review and critique the main currents of the household literature, including the "household survival strategies" approach. Rather than consciously strategizing to survive, families find ways to get by and defend themselves, resulting in new household/family processes and forms. A clear demographic result is the emergence of increasingly complex households comprised of smaller families with fewer children. The economic crisis, along with falling fertility rates and thus fewer workers, requires that extended families increasingly band together in one house or on one lot.

Part 3 examines how households gain incomes sufficient to meet consumption needs while minimizing consumption costs, particularly housing. Families may send multiple workers into the labor force (particularly into the flexible informal economy) or deploy various "quality" workers in and out of the labor force. The authors avoid common romanticization of the family as a consensual unit and acknowledge the tension and high level of conflict and often violence that characterize many of these households. On the other hand, they reveal an increasing need for family unity as adult men realize the need for wives' and children's incomes.

The authors refer to a delicate balance that continues to exist in Mexico between individuals, the household, and the state (a dependent capitalist one) in which none must gain a permanent upper hand. Individuals who seek their own roads must be controlled and subverted to household needs and households must be maintained to reproduce Mexico's workers cheaply and effectively. The prevailing ideology of machismo and popular attitudes about family relations in Mexico, as well as the restriction of educational opportunities, insures the maintenance of the Mexican kinship and domestic organization that is crucial to the functioning of this system. The badly educated workers thus produced are appropriate to Mexico's increasing dependence, as highlighted by the impending Mexico-U.S. free trade agreement.

Two of the three senior authors (Selby and Murphy) are anthropologists, while the third (Lorenzen) is an economist. This interdisciplinary effort results in a book that is convincing because of its strong quantitative and qualitative methods as well as in its clarity of presentation. Plenty of tables and multivariate analysis of the nearly 10,000 households distinguish this work from most work by anthropologists. However, more ethnographic accounts, which the authors use so well in too few instances, could have illustrated further the processes and lived experiences of the actors; instead, valuable space is wasted on quantitative analysis that is less important to the central argument.

All in all, this book stands out as an important contribution to understanding not only the Mexican case but for understanding the household economy and how it responds to changes in the wider political economy.

It is exceptional in that it draws largely from the valuable contributions made by Latin Americans to the subject. It is highly readable and concise and would be a useful text in a course on the sociology of development or a course on the family and/or household.

*Poverty, Inequality and Income Distribution in Comparative Perspective: The Luxembourg Income Study.* Edited by Timothy M. Smeeding, Michael O'Higgins, and Lee Rainwater. Washington, D.C.: Urban Institute Press, 1990. Pp. xxv + 193. \$36.50.

Frank Levy

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Through most of the post-World War II period, incomes became less equal during recessions and more equal during recoveries. The exception was the recovery of 1982-89 in which family income inequality grew, even as the unemployment rate fell.

As we grope with this problem, a natural perspective is the experience of other countries. Ten years ago, that perspective would have been made inaccessible by limited and noncomparable data. Today the situation is much improved, a result of heroic efforts by the members of the Luxembourg Income Study (LIS).

*Poverty, Inequality and Income Distribution* contains both an introduction to the LIS data base and a set of exploratory studies using these data. Both parts are of interest.

The nature and potential of the LIS data are the subjects of the book's foreword, introduction, and first and final chapters. In U.S. terms, the LIS data resemble the family and household information on the Current Population Survey's March Demographic Files, with two extensions. The first extension is the inclusion of the household's estimated direct taxes and payroll taxes paid. The second, and major extension, is the construction of approximately similar data sets for countries outside the United States. Six countries including West Germany, the United Kingdom, and Sweden were available when the book was written. An additional six countries have become available since then. Initially, each country's data were limited to a single year between 1979 and 1981. The book notes that a second round of data for 1986-87 is now available (or should be shortly), but even the initial data permit detailed cross-country analyses that would have been impossible 10 years ago.

Chapters 2-6 contain such analyses including comparisons of family income inequality, the role of taxes and transfers in altering inequality, the extent of poverty, the relationship between income and age, and the economic position of single-parent families, each in a cross-country format.

None of these studies are the last word on their subjects, nor are they meant to be. They come, as some of us would say, from the "Joe Friday



school," which emphasizes "just the facts" of cross-tabulations without extensive interpretation or background. But some of these facts are quite interesting. In chapter 2, Michael O'Higgins, Gunther Schmaus, and Geoffrey Stephenson present a basic comparison of family-income inequality across the initial sample. They show how the United States, West Germany, and Israel all have relatively large income inequality; Sweden, relatively low income inequality; and Canada, the United Kingdom, and Norway lie between the two extremes. A major determinant of these differences is the generosity of a country's transfer system and its effect on the bottom of the distribution. But a complete story is more complex with, for example, direct taxes exerting an important equalizing effect in Sweden and Norway (no surprise) as well as in the United States and Israel (a surprise). Similar facts have appeared elsewhere, but they have been based on weaker data and are more open to question.

There is little meat on these bones and so persons interested in, say, *why* Sweden's tax and transfer system evolved differently from the United Kingdom's will have to look to other books. This book is designed as a gateway to a fascinating and potentially very valuable data set. It fulfills this role superbly.

*At Risk of Homelessness: The Roles of Income and Rent.* By Karin Ringheim. New York: Praeger, 1990. Pp. xvi + 263. \$45.00.

Charles J. Hoch

*University of Illinois at Chicago*

In the scientific quest for the causes of homelessness, debates have raged between those who test for the impact of social vulnerabilities (e.g., mental illness) and those who analyze the influence of structural factors (e.g., declines in real income). Ringheim sides with the structuralists. After her brief summary introduction she provides a theoretical chapter that favorably reviews literature documenting the strong association between vulnerabilities, such as mental illness and addiction, and the prevalence of homelessness and then quickly relegates these effects to a secondary role. The growing housing-affordability squeeze in the late 1970s and early 1980s is the crucial cause of homelessness—a squeeze closely tied to an inequitable redistribution of income fostered by federal government policies. As the affordability slope of many metropolitan housing markets got steeper, low-income tenants began slipping downward. Those burdened with mental illness or addictions were more likely to slide farther and faster, falling out of the market altogether and onto the streets or into shelters.

Ringheim's research design uses data on housing units' households from the American Housing Survey (AHS) collected for standard metropolitan statistical areas (SMSA). She analyzes differences over time (1976, 1979, and 1983) for measures of housing quality, income, rent, and social

composition of renter households in four SMSAs selected from a larger universe to control for variations in the extent of homelessness, homeownership, percentage minority, and geographic region. Ringheim develops a vulnerability index (the proportion of low-income renters paying more than 45% of income for rent) that she uses as a measure of the size of the metropolitan population in an SMSA facing a high risk of becoming homeless.

Ringheim explains the connection between economic inequality and homelessness by using narrative accounts of changing relationships between economic vulnerability, housing affordability, and the social composition of tenant households in Baltimore, Houston, Chicago, and Seattle. Ringheim provides convincing accounts of regional variations in the patterns of change and the contribution of economic inequality to the housing affordability squeeze to the urban poor. In some regions income declined faster than rents, in others the relation was reversed. But in all cases the affordability squeeze increase was accompanied by more overcrowding and doubling up within low-income households.

Less impressive are her efforts to use homeless estimates collected from studies much less reliable than the AHS. The formula Ringheim creates to predict the rate of homelessness in a metropolitan region on the basis of economic vulnerability of low-income renters, therefore, lacks the reliable data on homelessness needed to test its accuracy and effectiveness.

Ringheim organizes her empirical analysis and findings methodically and in great detail in over 40 tables and 30 figures. Especially compelling is her chapter analyzing changes in the relationship between housing quality and price over time for each SMSA. Using hedonic equations, she first regresses gross rent on housing-unit characteristics and then adds the characteristics of the tenant to test the relative effects of quality controlling for the socioeconomic characteristics of tenants. Comparing the relative effects for 1976, 1979, and 1983 reveals a reduction in the contribution of housing quality and an increase in the contribution of such socioeconomic variables as race and female-headed household to the explanation of variation in gross rent.

This research monograph provides a competent and useful body of evidence documenting the increasing intensity of the housing affordability squeeze for segments of the urban poor. In the end Ringheim blames federal policies favoring home ownership and legitimizing lower housing standards for the poor. But this claim lacks the sort of developed empirical argument she uses elsewhere. Those with less liberal social values will, I suspect, remain skeptical about federal responsibility. But those still attached to the efficacy of filtering in urban housing markets will find cause for concern.

*A Fragile Movement: The Struggle for Neighborhood Stabilization.* By Juliet Saltman. New York: Greenwood Press, 1990. Pp. xvii + 453. \$55.00.

Richard Taub  
*University of Chicago*

Juliet Saltman was a member of that group of people who, in the sixties, tried to maintain middle-class integrated neighborhoods in those parts of cities with fine old houses and middle-class traditions. Her own personal effort in Akron failed, and, a few years ago, she decided it was time to take stock.

This book is the result. In it, Saltman takes a look at a number of city neighborhoods whose residents tried to build integrated communities. These included Butler-Tarkington in Indianapolis, the 19th Ward in Rochester, Sherman Park in Milwaukee, Blue Hills in Hartford, and her old neighborhood in Akron's west side. She constructs a history of each community's minutes and old newspapers, and making observations. Then, she attempts to explain the outcomes to date among the successes, failures, and those that are "conditional." Finally, she describes the history of the National Neighbors organization, which attempted to link the efforts across communities and to provide support.

This is an excellent book for those who want to know what happened to these particular communities and the appropriate community organizations. The author conscientiously describes organizational efforts and city responses in each case. Saltman and her friends are the kinds of people who literally weep for the decline of old city neighborhoods, particularly those whose decline is accelerated by some aspect of the racial change process.

The book is less satisfactory for those who would like to see the development of theory. If the dependent variable is something like the level of racial integration, social-movement theory does not seem to be the road that will yield fruitful relationships. Rather, the real payoffs for understanding the outcomes are more likely to be found in theories of markets, prejudice, and political and social organization. Indeed, the list of "hypotheses of stabilization movement success," which includes such variables as housing-supply levels, the role of city government, and the level of neighborhood amenities, mainly points in those directions.

Given a more appropriate theory to guide the research, there might also have been more informative data about such things as housing prices, crime rates, and school test results. However, given her approach, one would have liked to see more about the difficult position in which African-Americans often found themselves in efforts to achieve "integration." Nonetheless, for those who care or cared about neighborhood integration and the preservation of a rich life for urban neighborhoods, Juliet Saltman's book provides informative reading.

*The Politics of Righteousness: Idaho Christian Patriotism.* By James A. Aho. Seattle: University of Washington Press, 1990. Pp. x + 323. \$19.95.

Jerome L. Himmelstein  
Amherst College

The resurgence of neo-Nazi, Klan, and other extremist groups has been an important, though relatively understudied, part of the general flowering of right-wing movements in the United States since the late 1970s. Although these groups are broadly similar in worldview to the more visible and politically acceptable New Right, they tend to emphasize more heavily a conspiratorial view of American government, often with racist or anti-Semitic elements. They also tend to favor extralegal political tactics ranging from tax resistance to outright terrorism.

James A. Aho's *The Politics of Righteousness* sheds considerable light on this phenomenon, although not in a wholly effective way. Aho has traversed the wide expanse of Idaho, a major center of hardline right-wing activity, to interview and observe what he calls "Christian patriots" in a range of groups.

Christian patriotism, as defined by Aho, combines an evangelical belief in personal salvation through Jesus Christ and a fundamentalist reading of the Bible (and the U.S. Constitution) with the belief that a "secret satanic conspiracy has infiltrated America's major institutions to subvert God's will," a conspiracy that must be fought by a "politics of righteousness" (pp. 16–17). Aho subdivides Christian patriots into Christian Constitutionalists (ranging from the relatively sedate John Birch Society to the Posse Comitatus) and Identity Christians (including such violent racist groups as The Order). The former, who are disproportionately Mormon, identify the conspiratorial force abstractly as the "insiders," while the latter, drawing support among fundamentalist Protestants, identify Jews as the enemy.

The most interesting part of Aho's argument lies in chapters 7–9, in which he tries to explain who gets involved in Christian patriotism. He rejects theories that explain Christian patriotism as "due to an absence of something, such as education or effective community ties" (p. 164). His sample of Christian patriots have more years of schooling than other white Idahoans, and they have at least as many durable conventional social ties. In other words, "breakdown" theories of one kind or another cannot explain their involvement.

Instead, Aho proposes a "political socialization" model that emphasizes prior religious training and access to movement networks. Christian patriots are drawn disproportionately from religions like fundamentalist Protestantism and Mormonism whose theologies predispose them toward a Christian patriot worldview: "The majority of Christian patriots in our sample were taught as youngsters what today they express in their righteous politics" (p. 180). What turns religious background into politi-

cal activism is "access to and involvement in what may be called a patriot 'opportunity structure'" (p. 209). About 90% of Christian patriots are recruited through preexisting social relationships with family, friends, co-workers, and coreligionists already involved in the movement. These ties reinforce previously learned beliefs and provide role models and a support network.

Aho's explanation of why and how individuals get involved in Christian patriotism is plausible and generally fits his data. It is consistent as well with recent social-movement theories that emphasize the rationality and social rootedness of collective action. Indeed, right-wing extremism must be the ultimate test of this view, and Aho thus makes an important contribution to the social movement literature.

The rest of *The Politics of Righteousness*, however, fares considerably less well. The effort in chapters 2–6 to understand Christian patriotism from within (as opposed to explaining it from the outside as in chaps. 7–9) wanders aimlessly and gets mired in arcane details. One wonders, moreover, why Aho so rigidly separates "understanding" from "explanation," when the latter focuses largely on the development of beliefs. In addition, the final chapter largely fails in its attempt to place Christian patriotism in a broader societal context, thus leaving the book with no convincing account of why a Christian patriot movement exists at all. Most important, Aho spends little time tying his study to the broader literature on social movements generally and the New Right in particular.

In short, although *The Politics of Righteousness* makes theoretically important points about a previously understudied subject, it largely fails to place that subject in the relevant societal and sociological contexts.

*Small-Town America in Film: The Decline and Fall of Community.* By Emanuel Levy. New York: Continuum, 1991. Pp. 298. \$27.95.

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Although well researched, providing the reader with many period insights, Levy's *Small-Town America in Film* strives to achieve narrative continuity at the expense of cinematic interpretation (see, e.g., Levy's treatment of *Alice Adams* and *Mr. Deeds Goes to Town*, pp. 43–52). Even then, the narrative accounts tend to compress highlighted films about life in small-town America into elliptical storylines, so that the uninitiated can keep pace with the gist of the author's thesis. Only occasionally does Levy indulge himself in cinematic explication ("The town's class divisions are established right away when the camera pans along Main Street, dwelling on 'Vogue,' an elegant store, then crosses to 'Samuels, a 5-10-15 cents store.' Alice shops at 'Samuels'" [p. 43]). Yet the author often seems to pass up the chance to "read" a film the way the director "wrote" it, as Frank Capra does in *Mr. Deeds*, when he juxta-

poses stereotypes to provoke insight into small-town versus big-city social divisions.

Levy's thesis is that the depiction of small-town life in film is uniquely American. In the 1930s, for instance, filmmakers used comedy to portray small-town life; in the 1940s, serious drama and war films; in the 1950s and 1960s, melodramas; in the 1970s, horror films; and in the 1980s, satire. The moods of filmmakers have also appeared to change—from viewing earlier small towns as organic webs of life to viewing contemporary small towns as just corrupt and full of disillusionment as big cities. Nevertheless, Levy points out that a number of enduring myths still characterize small-town films: (1) leaders are more often than not recruited from common people, who are imbued with charisma; (2) lawlessness is usually not problematic, instead, too much law and order tends to exist and to undermine the hopes and ambitions of small-town characters; (3) outsiders often play a pivotal role; and, finally, (4) small-town life revolves around tensions between the sacred and the profane (between the ordinary, mundane, unremarkable, and the exceptional, the awesome, and the ritualized).

*Small-Town America in Film* creates the impression at first, however, that small-town life in the 1930s and 1940s was somehow nobler than life in the big cities. Such an impression is not altogether defensible, even in American films; and Levy misleads the reader by not contrasting optimistic small-town films with optimistic big-city films—namely, film musicals such as *Follow the Fleet*, *Top Hat*, *Swing Time*, *Bright Eyes*, *Curly Top*, and *Meet Me in St. Louis*. In these films at least, big-city Americans were no less optimistic than small-town folk; and it may be the case that American screen heroes were in general more optimistic in the 1930s and 1940s than they are today. That Levy categorically excludes film musicals from his analysis reflects a reluctance on his part to search for cases that might falsify his thesis.

To the extent that Levy embraces auteur theory (see Tim Bywater and Thomas Sobchack's *Introduction to Film Criticism* [New York: Longman, 1989] for an extended discussion of this theory), his methodology inherits the theory's tendency to treat contingent relations as necessary ones. That is, to appreciate and comprehend the mastery of Pasolini's *Accattone* one need not screen Fellini's *I Vitelloni*, even though doing so might enhance one's awareness of Italian cinema. It seems evident that Levy uncritically accepts auteur theory (pp. 11–12, 255); but the theory itself illogically assumes that symbolic meanings transcend individual works of art and that film analysis should emphasize the unity of a body of work. Social currents do indeed influence a filmmaker's career; yet each and every film is literally bounded by its own frames and none other. Consequently, the future of the sociology of film may become bogged down in inconsistencies if sociologists continue to endorse earlier film theories without being cognizant of their limitations.

*The Love of Art.* By Pierre Bourdieu and Alain Darbel with Dominique Schnapper. Translated by Caroline Beattie and Nick Merriman. Stanford: Stanford University Press, 1990. Pp. viii + 182. \$29.50.

Judith R. Blau

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The sociological audience for *The Love of Art* is probably comparable in size to that of those who bought *Godel, Escher, Bach* and read it during a week's holiday at the beach. But this book, like Hofstadter's, will be bought by many more sociologists than will read it. American sociologists will be put off here because the mathematics, the theory, and the empirical data are quite independent of one another (and sometimes contradictory), and the book is abominably organized. Never mind. Bourdieu is the brilliant provocateur. Because this book is about European museums and museum visitors, I will provide alternative "tours." The *Fodor* tour is for those who are just passing through; the "dogged tourists" guide is for the sort who typically travel with *Hallwag* maps and a *Blue Guide*, and the third is for the "returnees" who wish to explore a bit.

*Fodor* tour: After skimming through the excellent appendices, which include the well-designed questionnaires that were used for the national French survey and some tabular results of that survey, proceed directly to chapter 4. In a subtle refinement of the concept of cultural capital, Bourdieu and Darbel suggest that contemporary aesthetic theory presumes naïveté (fresh eye) for ever-changing art styles. Members of the upper classes are not especially advantaged by their Latin education and early art classes when they visit an exhibit of modern art and, in principle, are on the same footing with the rest of us. But Bourdieu, like Gadamer (in *The Relevance of the Beautiful* [Cambridge: Cambridge University Press, 1986]) recognizes the impossibility of cognitively decontextualizing modern art and concludes that academic culture so profoundly interiorizes generalized cultural codes that the working classes remain marginalized in the world of art. The crux of the argument is a categorical duality and immutable cultural universe (the "barbarians" and the "civilized").

*Reception* theory is central to the argument. By extending a psychological postulate of the theory (namely that the information offered corresponds to the competence of the receiver), Bourdieu et al. leap from an analogy (transmitter is to receiver as supply is to demand) to the conclusion that the quality of culture corresponds to the educational profile of the public. Although the empirical data show that age, residence, occupation, and education are all related to museum visiting, the authors posit (and derive in a set of equations) that categories of visitors distinguished by level of education are homogeneous with respect to museum visiting. With cultural demand (competence) thus defined in terms of four educational categories, supply (level or quality of information) is assumed to be equal to the distribution of demand. To wit, the distribution of

information transmitted and information received is a skewed bell-shaped (Laplace-Gauss) curve based on the distribution of the population by educational levels.

However—to return to the paradox of the fresh eye—in the case of contemporary art, the gap between information and education increases exponentially so, as information becomes more sophisticated, the disadvantaged become increasingly disadvantaged. Neat. But the point is that their mathematical model contradicts their own empirical data and considerable other research (for example, the studies by Jutta Allendinger and earlier work by Elihu Katz and Michael Gurwitsch). Such studies as these show that increases in educational levels over time influence aggregate cultural behavior, and that individuals' cultural behavior is affected by their community contexts, by supply, as well as by their own attributes.

*Blue Guide* tour: One interesting exercise is to analyze the results of the survey that the authors report in appended tables. Table A4.2 is cited as evidence that the working classes exaggerate the length of time spent in a museum. However, this conclusion ignores the trivial number of working-class respondents and is based on questionable assumptions about what exaggeration is. It makes sense to combine the answers of working and middle classes and to assume that overestimating by five minutes is not hyperbolic. Using such minor adjustments in cell assignments, the odds on exaggerating for members of the upper class is 1.5 times greater than the exaggeration odds for members of the working and middle classes combined.

For readers for whom the "language rustles" there is an unfulfilled promise: the museum is a "test" (p. 51), which might suggest that it is also a "text" (Barthes, *The Rustle of Language* [Berkeley and Los Angeles: University of California Press, 1989]), but Bourdieu is not prepared to make the Barthesian leap: "meaning denies substances all intrinsic value. . . ." (*The Fashion System* [New York: Hill and Wang, 1983], p. 279). Instead, there is a positivist rigidity in *The Love of Art* that may be somewhat off-putting to American theorists and empiricists alike. Although the authors stress the importance of schooling in France and elsewhere (particularly Poland), they dismiss the consequences of increasing education over time for the distribution of cultural capital. While age and gender effects are pronounced and there are strong interaction effects involving age and gender categories with educational levels on visiting patterns (table 3.1), the authors crankily persist: "It is thus established as given that different categories of visitors distinguished by level of education are homogeneous in the intensity of their visiting" (p. 22). They are undoubtedly correct that inequalities in the monopoly of cultural capital help to consecrate the social order. But the leap between the assumptions of their overly deterministic mathematical model and the empirical data is one of faith.

The *returnee tour* might start with the premise, "[sacred places of art] all seem to serve as reminders [of the] transition from the profane to the



sacred" (p. 112). However, it may be a *dangerous* enterprise "to take," paraphrasing Lakoff, "a God's eye view" of categories (*Women, Fire, and Dangerous Things* [Chicago: University of Chicago Press, 1987], p. 365). Instead, we may, along with Lakoff, who posits multiple domains of conceptualization and differentiated schema—and with Simmel, who considers varieties of realms of social participation—view cultural worlds as complexly structured. Some kinds of cultural experiences are universal—television—whereas specialized domains of culture—museums, jazz, baseball, and chamber music—draw upon special interests. Audiences and cultural worlds overlap in intricate ways. Moreover, there are currents of antiintellectualism and antielitism that undermine the pretenses of traditional culture, just as there are domains of snobbery that eschew popular culture. The returnee is invited to explore these possibilities; my recommendation is to explore them with companion guides since to ignore how politics, language, and economy infuse and empower culture is to miss the whole point of what hegemony is all about.

*Corporate Art.* By Rosanne Martorella. Rutgers University Press, 1990. Pp. xiv + 209. \$40.00 (cloth); \$15.00 (paper).

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Early in 1991 the court-appointed administrators of the "ailing conglomerate," Polly Peck International P.L.C., realized \$8.8 millions through an auction of the "art treasures" the firm had amassed. The sum far surpassed the expectations of the auctioneers and helped to make a small dent in the billions owed the firm's creditors. This is not the first time in recent years that corporate art collecting has come to public attention. It suggests that scholars working on the arts would do well to pay serious attention to the role of these firms in creating the climate within which the arts today are created and disseminated.

In the practical world of the art market, the corporate presence, once confined to a few firms, has been a factor for three decades. Diana Crane has indicated their effect on the opportunity structure of artists, thereby helping to "transform" the avant-garde (*The Transformation of the Avant-Garde* [Chicago: University of Chicago Press, 1987]). Although art magazines have dealt with corporate collecting, and even though the corporate presence as a patron is increasingly evident in museum exhibits or even in branch museums located on corporate premises, until now, few sociologists have paid serious attention to them. Rosanne Martorella makes a valuable start in turning attention to this new and, as she convincingly argues, influential phenomenon.

Her book deals with the historical and structural changes that provide the background for their shift from almost no art collecting or patronage

to the contemporary situation in which some 1,000 art collections are found in American corporations (p. 3). Not only do corporations collect, but they provide support for art-related activities, such as sponsoring tennis matches or art education. Unlike the National Endowment for the Arts, whose support peaked in 1982 at \$220 million (and has fallen considerably ever since), corporate support amounted to \$500 million in 1987 (pp. 11–13).

One consequence of this growth is that it has led to the emergence of the new profession of art advisors. Major corporations recruit them from among directors and curators of museums; minor firms hire them from art schools. Art is an investment but, in a sense, all visible corporate art and art support is also high-class advertising or public relations, serving, as does the corporate headquarters building, to represent the image its directors wish to convey to its clients and the public more generally. It provides an opportunity for corporate polluters or cigarette companies to paper over or drown out their insalubrious effects on the environment or health.

Corporate styles range from homey nostalgia, especially in the Midwest and South, to abstract forms of (largely) Northeastern, major financial institutions, and multinationals. Martorella reminds us that most corporations merely buy art to decorate their offices. Because of image goals, however, corporations tend to be timid collectors. Even more than federal arts agencies, they avoid art that might shock their public. Whereas abstract art was once daring and rebarbative, for major corporations, neat, decorative nonfigurative art projects a sophisticated image without the problems that political or religious content or nudity have tended to raise.

Martorella's book is informative and rich in empirical data. Although she makes no attempt to link her finding to theoretical ideas, she has opened the path to an important area of concern with both symbolic and economic ramifications.

*Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment.* By Patricia Hill Collins. Boston: Unwin Hyman, 1990. Pp. xvii + 265. \$44.95 (cloth); \$14.95 (paper).

Judith Rollins  
Simmons College

*Black Feminist Thought* is a rich and valuable book. It is a book of reclamation, rearticulation, of synthesis and empowerment. Patricia Hill Collins more than achieves her goal "to describe, analyze, explain the significance of, and generally further the development of Black feminist thought" (p. 16).

Collins skillfully calls forth the voices of black women writers and activists of the 19th century, of blues singers, of poets and artists, of

everyday workers, and political luminaries. In reclaiming and legitimizing the ideas of women of such diverse backgrounds, Collins demonstrates that there is indeed a distinct philosophical tradition among African-American women that is both Afrocentric and feminist in its themes and approach.

The distinct origins and epistemology of black feminism is precisely why Collins uses such dissimilar sources of knowledge. Black feminism is "subjugated knowledge" (p. 18) which has emanated from both the African worldview and the gender/race/class oppression of black women in the United States. A part of that oppression has been the suppression of ideas threatening to the dominant (white, male) power structure. Credentialed scholars who have challenged masculinist, Western assumptions and methods, who have refused to become one of the "safe outsiders" (p. 204), have risked their credibility and positions. "This suppression . . . in traditional sites of knowledge production has led African-American women to use alternative sites such as music, literature, daily conversation, and everyday behavior as important locations for articulating the core themes of Black feminist consciousness" (p. 202).

And these alternative sites, these "safe spaces" (p. 95) where black women have intellectually resisted, have allowed for the retention of an African philosophical tradition within the Euro-American setting, and of black women's positive self-definition and valuation within a system that consistently, in theory and practice, objectifies people of color and women.

Collins devotes two-thirds of the book (pt. 2) to an exploration of the themes that emerge from the oral and written expressions of 19th- and 20th-century black feminists. In chapters that can each be used independently, Collins summarizes the major ideas of African-American feminists on work, family, images of black women, motherhood, political activism, and relationships (especially with one another, black men, and whites). And she does more: in discussing the reasons for the neglect of certain issues important in the lives of black women—such as domestic violence, pornography, and prostitution—she begins the discussion of these topics and points the way for further research.

Collins's final section, "Black Feminism and Epistemology," is, by far, the most thought-provoking and creative. Collins delineates what constitutes knowledge for black feminists and how such knowledge is gained, justified, and validated. Black feminists, she contends, emphasize the importance of wisdom gained through experience, of dialogue and connectedness to others, of the ethics of caring and personal accountability in the production and justification of knowledge. Collins explores each of these processes carefully, guiding the reader through the sources and consequences of each component, noting, where applicable, the fascinating congruencies between African and feminist values.

Throughout this book on "thought," Collins makes it clear that the ideas of black feminists are one element of their resistance to domination. She shows that from the writings of Maria Stewart in the early 19th

century to those of Angela Davis today, black feminism has been a part of political activism, its existence both rooted in and generating black women's desire for change. "Thus black feminist thought aims to develop a theory that is emancipatory and reflective and which can aid African-American women's struggles against oppression" (p. 12).

"Black feminist thought's emphasis on the ongoing interplay between Black women's oppression and Black women's activism presents the matrix of domination as responsive to human agency. . . . The existence of Afrocentric feminist thought suggests that there is always choice, and power to act" (p. 237).

Collins's book expresses that power. By making risky choices—by putting black women at the center of her analysis, by refusing to limit her sources to credentialed "experts," by refusing to distance herself from the women about whom she writes—Collins empowers herself, begins a deconstruction of "scholarship," and inspires other outsiders to build on her challenge. *Black Feminist Thought* is a well-researched, thoughtful, and comprehensive coverage of the little-known intellectual tradition of black women in the United States. But, more important, *Black Feminist Thought* is itself an act of resistance.

*Health, Race and German Politics between National Unification and Nazism, 1870–1945.* By Paul Weindling. New York: Cambridge University Press, 1989. Pp. x + 641. \$69.50.

Claudia Koonz  
Duke University

How much must an insurance plan pay for high-technology medicine to sustain a terminally ill or very elderly patient? May such a patient decide to end his or her life? When amniosentesis reports Down's syndrome, what will Catholic parents decide? If the test predicts "it's a girl" in India, what may parents choose? What about voluntary access to RU 486 in France, required use of Norplant in St. Louis, or "granny brigades" in China? In only a few years, it seems, we have had to confront unprecedented questions about the value and indeed the definition of life. Our astonishment is due in part to historical amnesia. The precedents exist, but they lie buried in the discredited endeavor of eugenics. As soon as Hitler made eugenics into a central Nazi tenet, international enthusiasm faded—as did the subsequent memory of our flirtation with racial purification.

Paul Weindling's superb historical analysis of health, race, and politics in Germany provides nonspecialists and medical scholars alike with a thorough grounding in the origins and politics of these bioethical questions. This is a tour de force of research drawn from individual papers, institutional and public archives, and primary literature. In the resulting intellectual and political history of medical solutions to social and political

problems, Weindling explores scientific discoveries and social aims within dramatically contrasting political settings (during the eras of Bismarckian, Wilhelmine, Weimar, and Nazi Germany). Weindling weaves together a lucid narrative of eugenics, racial science, public health, demographic sociology, and social hygiene. Into this mix he adds individual biographies as foreground and, for background, examines organizational history, international philosophical and cultural developments, medical opinion and its dissemination, social scientific experimentation, lobbies, and quack schemes. Weindling balances the impact of scientific discovery against broad popular trends and leaders' aims.

This remarkably complex narrative is held together by a tight chronological scheme, which is the kind of approach customary in the "march of science" histories so scathingly attacked by Thomas Kuhn. The brilliance of *Health, Race and German Politics* lies in Weindling's ability to analyze a powerful continuity from which no paradigm has emerged victorious. Racial biologists did not produce crisp paradigm shifts like the Copernican revolution or the *Pasturization of France*, analyzed by Kuhn and Bruno Latour. Even the victory of "distinctive Nazi concepts of race, science and society" (p. 491) that defeated liberal reforms, did not usher in unity for, as Weindling comments, "The racial side of racial hygiene was fragmented and fissiparous" (p. 471). Ultimately Himmler's political skills forged a lethal unity among his "biological and medical experts, who combined Nordic idealism, agricultural economics and Mendelian hereditary biology" (p. 474). But this consensus, too, gave way to bitter debates between populist anti-Semites and elitist technocrats dedicated to racial health care (pp. 495–97).

Weindling explores the labile border between utopian visions of human emancipation and technocratic, arrogant schemes for human betterment. No organization proved stable over a long period, as debates between biological science versus social welfare pulled members in different directions. Deft group portraits of these middle-class careerists display the seemingly infinite number of ways individuals blended social concern and personal ambition.

By weaving biographical detail into a chronological account based on organizations and institutions, Weindling heightens the moral complexity of the issues he describes, although the effect of a dozen or so leading characters making brief appearances over 50 years may remind readers of Tolstoy. Alfred Ploetz, for example, occupies part of stage center for five decades as the epitome of the enterprising professional in his love life, his research, and, finally, his political drift from leftist dreams to technocratic solutions for social problems. Other less influential individuals make brief appearances as illustrations of particular trends. In a discussion of "racial poisons," for example, Weindling introduces us to two "lapsed bacteriologists," Adolf Gottstein (a liberal advocate of social medicine) and Ferdinand Hueppe (a racist and hereditarian) who in the 1890s looked at the same data and saw it in opposite ways. Agnes Bluhm, one of the very first women physicians, crusaded vigorously against con-

traception and supported Nazism. The pioneer sex researcher, Magnus Hirschfeld, is portrayed, both because he wielded so much influence, and because he, too, made "the transition from utopianism to social biology." Weindling underscores his observations with tables. Two in particular point to the connections between science and politics: a list of recipients of research money from 1933 to 1945, and a list of prestigious academic positions granted to former Nazis in the Federal Republic.

Weindling's material is rich in visual imagery and dramatic metaphors. Although I admire his skill at using theory to inform his insights without cluttering his prose with critical language, I would have appreciated more explicit discussion of the mythology created by the eugenicists and racial scientists. He notes, for example, the way military metaphor shaped bacteriologists' "war on germs"; he reproduces a postcard of a nurse as saint and health publicity featuring a madonna and child; and he explores the hysteria about "Sexual bolshevism" but leaves it to the reader to connect symbols and settings. The hygiene eye on the cover illustration might, for example, have become an overarching metaphor in Weindling's account, because it represents the eye of the Enlightenment and Masonic imagery as well as the ever-watchful eye of God. Since one of Weindling's themes is the gradual substitution of a religious *Weltanschauung* by a medical vision of the world, the eye reminds us of the double heritage of science: its potential for surveillance to control and knowledge to emancipate.

As we ponder the dilemmas created by scientific progress, Weindling reminds us of how political the seemingly neutral terrain of medicine is. Late 19th-century racial science and eugenics did not inevitably hasten the slide down the ethical slippery slope from genetic intervention to genocide. Politics did.

*Partners in Science: Foundations and Natural Scientists, 1900–1945.*  
By Robert E. Kohler. Chicago: University of Chicago Press, 1991. Pp.  
xv + 415. \$34.95.

Daniel Lee Kleinman  
*University of Wisconsin—Madison*

This is an interesting, if problematic book. In it, Robert Kohler explores the transformation of foundation research sponsorship from just after the turn of the century up until just before World War II. He tells the story of the changing partnership between scientists and the two great scientific philanthropies, the Rockefeller Foundation and the Carnegie Corporation.

Kohler traces changes in patronage over time. He considers, among other things, the transition from a "limited partnership" between scientists and foundations in the 1920s, in which scientists were granted large sums of money to allocate as they saw fit, to a more intimate relationship

in the 1930s, in which foundation managers funneled money to specific types of research. Kohler also explores regional variation with the United States and Europe, considering how local circumstances constrained patterns of funding and the likelihood of successful funding relationships. Thus, for example, he looks at how suspicion in the Midwest of the Rockefellers made funding university research there difficult (p. 224).

Kohler's preface suggests a promising book, a rich historical story framed by an unidealized, post-Mertonian view of science. Kohler does not view science as an autonomous social space where scientists work in their laboratories and attend conferences, oblivious to what is going on in other social arenas. Instead, he argues that science is "a complex social system with many actors, in which securing resources, negotiating with patrons, creating departments and disciplines, competing for talents, designing products and services, and projecting public images [are] . . . no less essential than bench research" (p. xiii). Science, for Kohler, is a "social process," and he argues, following Bruno Latour, that we must take a "holistic and inclusive view" of science (pp. xiv, 2).

Assertions and programmatic statements notwithstanding, the current work in the sociology of science, largely dominated by laboratory studies, often fails to conceptualize adequately or consider empirically the linkages Kohler points to between what goes on in the laboratory and the nature of research funding. This work typically does not systematically consider how these linkages alter power dynamics or more straightforwardly shape research agendas and what is done in the laboratory.

From the claims Kohler makes in his preface, one would expect that this book would fill a void in current social studies of science, examining the linkage so often overlooked and, to a degree, Kohler's work does this. In an important case, for example, Kohler considers in detail the boost the Rockefeller Foundation's Warren Weaver gave to interdisciplinary research in the 1930s—more specifically, to biological research utilizing the tools of physics and chemistry (pp. 265–357).

Where Kohler's work falls short, it is often a result of his ad hoc and inconsistent use of his analytical tool bag. In exploring the different paths to National Research Council (NRC) fellowships for biologists and physicists, for example, Kohler points to the homogeneous and centralized character of physics and the fragmented character of biology as fundamentally shaping the rather different experiences of biologists and physicists in this case (pp. 107, 108). Among other things, the physics' elite were able to act autonomously from the discipline's rank and file, whereas leading biologists were "obedient to grass-roots opinion" (p. 110). But in the end, Kohler's explanation for the three-year delay in the initiation of NRC fellowships for biology appears to have to do with a broad range of highly situational factors that are only loosely tied to disciplinary organization.

A related problem with the book is that Kohler gets so caught up in the minutiae of the individual characters that motivations for action appear highly idiosyncratic and his attempt at broad social contextualiza-

tion is lost. This shortcoming is evident in Kohler's exploration of the progressive usurpation of decision-making power from foundation trustees by a group of science managers.

Kohler does hint that the growing prominence of foundation science managers is part of a larger social trend. He notes that the rise of these managers occurred roughly simultaneously with the bureaucratization of industry and the rise of a new group of corporate managers with commitments to rationalization and efficiency in the early 20th century (pp. 37, 44). But his emphasis on the unique backgrounds of each foundation manager and on how the manager's very personal experience shaped his agenda prevents Kohler from seriously considering and theorizing the rise of foundation managers as a component of a rising new class. The social context Kohler presents us at the outset is lost in a web of detail.

In *Partners in Science*, Kohler does not always succeed in balancing analytically guided history writing with rich, detailed narrative. But the book nevertheless stands as a needed complement to laboratory studies. As more work like Kohler's appears, sociologists of science progressively gain the tools for more compelling explanations of the ways science works.

*Space Technology and Planetary Astronomy.* By Joseph N. Tatarewicz. Bloomington: Indiana University Press, 1990. Pp. xvi + 190. \$29.95.

Chandra Mukerji  
*University of California, San Diego*

Some science-studies books written by historians explicitly answer sociological questions with historical documents and display their sociological sophistication with well-placed references to standard works in the field. Others are written by historians who stumble into subjects that demand sociological analysis but who know little about how the work might fit into the world of sociological debate. The latter books might not always come to the attention of sociologists, but the best of them provide fresh views of what sociology could do to further scholarly understanding of scientific practice. This is certainly true of Tatarewicz's *Space Technology and Planetary Astronomy*.

This book chronicles the development of planetary astronomy with the growth of the U.S. space program, drawing pictures of the relationship between intellectual growth in the subfield and patterns of government sponsorship in stunning detail. Tatarewicz shows that the leaders of the space program had problems preparing to explore the planets because they had relatively little detailed information about the solar system for planning their missions. By the turn of the century, most intellectual leaders in astronomy had rejected planetary issues as trivial. Only through arduous government efforts did policymakers succeed in getting



the information they needed. This they did by initiating a sustained intellectual renewal of planetary astronomy.

Scientists at first used many forms of resistance to government pressure to turn their telescopes on the planets. They were not impressed when NASA simply offered them money to study the solar system. Fellowships from NASA supporting graduate work in astronomy helped mostly to train new experts on stars and distant galaxies; even the new telescopes set up by NASA to enhance planetary research were used as often as possible by scientists for the stellar measurements they most wanted to do. The research agendas already set by astronomers were not so easily reset just by some funding.

It seems that research universities were easier to lure with money and machines than individual researchers. The government offered institutional grants to build new telescopes, upgrade existing facilities, and set up centers for space research if the universities used their own resources to promote planetary astronomy. Interested university administrators then used their power to put in place the research programs that would qualify them for these funds. At the same time that centers for research were being prepared, space missions themselves began to make the field more appealing as measurements from the planets started to surprise astronomers and attract geophysicists. Once the work became intellectually intriguing to groups of researchers, the resources at their disposal in the universities sustained the intellectual vitality of the field.

The resulting advances in planetary astronomy were made with a balance of both ground-based and space research. NASA space missions did not grow enough in scope and frequency to make ground-based research obsolete, and ground-based research became sophisticated enough to provide scientific rationale and resources for further missions. New research findings came fast and radically challenged many reigning assumptions in the field. Ironically, this scientific success did NASA little political good. Public fascination with Mars and science-fiction dreams of little green men were undermined precisely by the scientific and technological success of the Mars mission. Diminishing public fascination with space flight left NASA vulnerable to funding cuts during the 1970s when the U.S. economy weakened considerably.

The end result, according to Tatarewicz, was that a highly skilled labor force of scientists, self-consciously created by the government from the extant scientific community in order to serve NASA, was suddenly no longer needed. A generation of planetary scientists began to be weaned from NASA money. Because some scientists had developed some genuine interests in the solar system, research in the field did not die out but while their expertise had formerly been carefully cultivated, it was now like any other area of science within the research university.

For Tatarewicz, this story challenges some of the conventional narratives in history and philosophy about changes in the intellectual agendas of science. This is a clear case where sheer scientific curiosity, individual genius, intrascientific struggles, or paradigmatic failings were not the ma-

major factors accounting for the rapid growth and revitalization of a sub-field. Government policy did that job with much effort and against many obstacles set up by extant patterns of scientific curiosity, the leadership of scientists, the work routines of scientific groups, and reigning paradigms. Government shaped developments in scientific thought not because NASA officials wanted to tell the scientists what they should think or what their theories should prove. Policymakers simply tried to lure scientists back toward the solar system when this fit policy priorities.

There is a lesson here for sociologists interested in the complex social embeddedness and autonomy of scientific thinking. Quite clearly in this case, *manpower* management by the government shaped scientific *thinking* and produced a world of specialists that space officials once dearly desired and then clearly no longer wished to support. There was no "thought police" in NASA orchestrating this story of scientific specialization any more than there were Martians on Mars, but the hand of the government did more than dangle funds for the scientists to follow. It activated a corner of the scientific labor force and then deactivated it when the war for dominance in space seemed trivial to politicians. In this scenario and to the surprise of scientists, the success of the planetary research program was no defense from (or even relevant to) the change in political winds. The welfare of planetary science was never the issue, even though the government temporarily provided means to enliven it considerably—apparently with long-term scientific effects.

*The Ethnographic Imagination: Textual Constructions of Reality.* By Paul Atkinson. New York: Routledge, 1990. Pp. vii + 195. \$52.50 (cloth); \$17.95 (paper).

Joseph Gusfield  
*University of California, San Diego*

The past two decades have witnessed a significant bridging of the gap between literary studies and social science. Under the impetus of the very important "linguistic turn" in intellectual and scholarly life, literary theorists have gone beyond privileging imaginative literature to include nonimaginative work as well as popular visual art in their studies. The resulting renaissance of rhetorical analysis has had an influence on some sociologists and social scientists who are considering the importance of the text as an integral part of the research. A number of papers and books have appeared in which standard social-science writing has been examined for its rhetorical and literary properties. In another arena, such sociologists of natural science, as Latour and Woolgar and Mulkay have similarly treated the text of science as a major part of the research. This book, by a sociologist at the University of Wales, brings together some of that work and, utilizing literary theory, takes ethnographic writing in sociology as the object of literary-rhetorical study. It is a successful effort

and important for the ethnographic sociologist. However, the flaws in Paul Atkinson's treatment of textual analysis raise some questions about the limitations of literary theories for the textual analysis of social science.

As the subtitle of the book suggests, the author's focus is on the representation of reality. As the title suggests, there is a paradox between imagination and reality that lies at the heart of his sociological texts. How the ethnographer attempts to convince the reader of his or her authority is the major focus. The stylistic means by which authors support the claim of representing their observations as true accounts is the problem of Atkinson's analyses. He uses a wide variety of sociological ethnography as the object of his study; such diverse accounts as Harvey Zorbaugh's *The Gold Coast and the Slum*; Jerry Jacobs's *Fun City*; Paul Willis's *Learning to Labor*; and Elliot Liebow's *Tally's Corner* are a few of the many studies drawn upon. As a general rule, his analysis is confined to a few in each chapter and to a single paragraphs of text. (This is an important matter to which I refer below.)

The bulk of the book is given over to the devices through which ethnographers have tried to deal with problems of constructing reality. Much attention is devoted to issues of *vraisemblance*—establishing the veracity of the text—as well as to the problem of being simultaneously an insider and outsider. Atkinson draws heavily from such structuralists and semioticians as Culler, Benveniste, Todorov, and Barthes. A section on Benveniste's terms of *historic* (story) and *discours* (narration) is especially useful in analyzing the issues of moving between observation and analysis in textual presentations.

Atkinson's book is valuable in bringing the literary theory of postmodern writers to bear on the construction of texts. It is in the one-directional manner of his usage that the problems of textual analysis in the social science are neglected. Despite an opening chapter in which he depicts the distinction between reader and author, he treats texts as isolated paragraphs and as devoid of contexts. This emphasis on language as literary device ignores the transactional nature of language and its special usage in the social and natural sciences. Atkinson forgets the audience of readers and particularly the communal character of that audience in scientific and empirical work. He recognizes that most social-science writing is persuasion and thus necessarily rhetorical. However, unlike most literary products, social-science writing occurs in an arena of explicit debate, discussion, prior development of problems, and rejections or supports of existing studies and theories. It has a directly polemical context. Latour and Woolgar and others have shown this for natural science. In a classic paper Bazerman has examined the textual problems this creates for different scholarly areas. For example, though Atkinson uses paragraphs from Whyte's and Suttle's studies of urban slums he does not analyze how those texts were organized in relation to existing perspectives about such slums. Although he touches on this aspect he cannot give it the importance it needs, in part, because he has not analyzed the studies as total narratives

His almost exclusive use of the postmodern literary theorists proves limiting; he ignores the issue of the audience, its reception of a work, and the author's efforts to construct and define that audience. He might have done better to give some play to Fish and to such earlier literary critics as Booth, Frye and, especially, Kenneth Burke. Neither does he draw extensively on the rhetorical analyses by social scientists such as McCloskey and R.H.V. Brown or the seminal work of the historian of research report styles, Charles Bazerman.

Given the limits of Atkinson's analysis, he does a very good job of acquainting the reader with much recent work by literary theorists and their effect on social scientists in the analysis of research texts. He demonstrates much of it in his own analyses as well. It is a good, though partial, entrée to a rapidly growing and important field.

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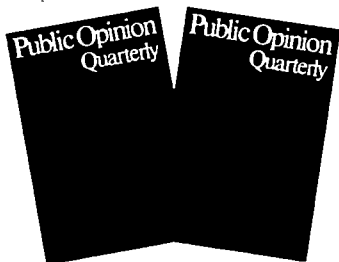


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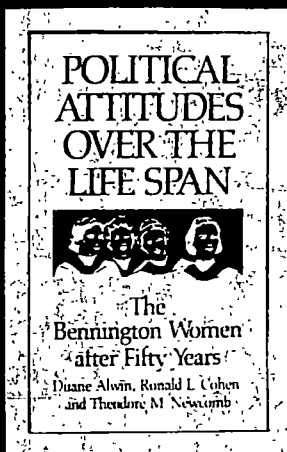
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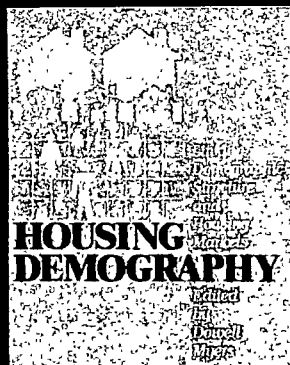
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